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FOOD

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from Poland No 4/7

Review of Exports of Agricultural
Products and Foodstuffs

PEK
CURED
PORK LOIN
in natural juices
NET WEIGHT 21 lb
KEEP UNDER REFRIGERATION

Skinless and Boneless
HAM
in natural juices
NET WEIGHT 21 lb
PRODUCT OF POLAND

Krakus
COOKED
HAM ROLL
WITH NATURAL JUICES
PRODUCT OF POLAND
POLAND EST N°

Krakus
BONELESS COOKED
POLISH PORK LOIN
WITH NATURAL JUICES
PRODUCT OF POLAND
POLAND EST N° 2
PERISHABLE-KEEP UNDER REFRIGERATION
Packed by Central Board of Meat Industry

Atalan
POLISH
HAM

yano
mageres
FEINEFLEISCH
Aufschnittware
HERGESTELLT UNTER
DER KONTROLLE DES STAATL.
STANDARDISIERUNGS-INSPEKTORATS

PERISHABLE-KEEP UNDER
REFRIGERATION
NET WEIGHT 1 LB
PRODUCT OF POLAND
POLAND EST N°

Krakus
POLISH PORK LOIN
WITH NATURAL JUICES
PRODUCT OF POLAND
PERISHABLE-KEEP UNDER REFRIGERATION
Packed by Central Board of Meat Industry

The FOOD from POLAND quarterly devoted to problems of food exports, appears in English and in German — as **LEBENSMITTEL aus POLEN**

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PUBLISHERS Wydawnictwa Handlu Zagranicznego (Foreign Trade Publishing Agency)

Kierbedzia 4, 00-957 Warszawa, Poland

POLEXPRESS, Editor FOOD from POLAND

Warszawa, Marszałkowska 124

Phone: 26-92-21 ext 95

PRINTED by Zakłady Drukarskie WHZ, Warszawa

The FOOD from POLAND quarterly may be subscribed through the Foreign Trade Enterprise ARS — POLONA — RUCH, Warszawa, P.O. Box 1001, Poland.

The sum earmarked for the subscription is to be transferred to the account with Bank Handlowy Co, in Warszawa 1, Traugutta 7, Poland.

Yearly subscription rates in Europe

\$4.—



Poland is one of the greatest producers of rye in the world. You find our relevant information on the various rye varieties and export possibilities on pp. 4 and 5.

On pp. 12, 13 and 14 we publish a report on the Fruit-and-Vegetable-Processing works in Włocławek. The products of this plant are exported to nearly every country in the world.



In our column OUR PARTNERS we write now about Sweden, publishing statements on Polish goods by importers and consumers from that country — on pp. 18 and 19.



Fine flowers and ambitious plans — these are the impressions recorded by our reporter when he visited the Gardening Plant at Mysiadło. We publish his report on pp. 32 and 33.





*Best wishes
for a prosperous
new year*

1975

Specialization of Polish agriculture within the Council for Mutual Economic Assistance

Poland is trading with practically all countries of the world. The closest, however, are her trade relations with the Council for Mutual Economic Assistance member countries. Whilst commodity turnover with third countries is based on immediate economic advantages, trade with the Council for Mutual Economic Assistance countries is based on broadly understood economic cooperation. The Council for Mutual Economic Assistance (CMEA) is engaged in coordinating economic development plans of its member countries, especially such elements of these plans as refer to two-way economic lines of exports and imports. Coordination activities also include scientific and technical studies, resulting, among others, in accelerating technical progress. Agricultural coordination and promotion of cooperation is the responsibility of the Permanent Agricultural Commission. Of the many initiatives of this Commission, the CMEA-sponsored agreement on cooperation in plant quarantine and protection, is of special importance for expanding economic integration. The Permanent Agricultural Commission also coordinated breeding work aimed at improving livestock breeds. For this purpose exchange of breeding stock and also exchange of semen from especially valuable breeding stock were organized. The agreement on cooperation in veterinary medicine prepared by the Permanent Commission, and approved by member countries, was also of considerable significance for the development of animal production. Exchange of information on the occurrence and intensity of contagious animal diseases sent by member countries was found to be of major importance. As a result of this activity, it was possible, among others, to prevent the spreading, of the foot-and-mouth disease, an outbreak of which took place last year in one of CMEA member countries.

Initiation and coordination of research by the Permanent Agricultural Commission is of great importance for the development of agriculture in all the countries concerned. International studies aimed at evaluating new plant varieties, common activities for improving industrial poultry production and pigs, international studies on complex systems of agricultural mechanization, can serve as examples thereof.

The most important branch of activities of the Permanent Agricultural Commission consists of work on specialization of agricultural production. This type of specialization is aimed, on the one hand, on taking best advantage of the potential production possibilities of the countries concerned and full coverage of requirements of importing countries on the other. Intensive studies are at present being carried on by member countries on the possibility and conditions of intensifying specialization of production in agreed upon branches of agriculture and food processing. Thus, among others, first agreements have already been approved on multilateral, international specialization in seed production, and production of veterinary preparations. The agreement on specialization in seed production covers, actually, all the plants, seed production of which requires appropriate soil and climatic conditions. Thus, for example, Poland will specialize in production of seed potatoes, sugar-beet seed, clover seed, etc., and supply such material to interested CMEA countries.

At the same time Poland will import maize and alfalfa seed, the production of which is not always successful in Polish climate.

Climatic and soil conditions in Poland are especially favourable for specialization in potato production. In this connection this country is not only the main supplier of seed potatoes to CMEA member countries, this having been confirmed by the above-mentioned seed production agreement, but also supplies food potatoes to countries interested in them.

Considerable quantities of consumer potatoes have been over the past few years supplied to the Soviet Union, Czechoslovakia and Hungary.

Poland has a well developed potato processing industry, and, as a result, not only specializes in export of consumer and seed potatoes, but also supplies its partners with potato products such as potato flour, spirits etc. It should be noted that Poland has considerable possibilities for increasing potato production and that of potato products for export, both to CMEA countries, and also elsewhere. The next commodity in the production of which Polish agriculture specializes is rape seed and rape seed oil. In producing and exporting large quantities of rape seed and rape seed oil to, among others, the Soviet Union and Hungary, this country is interested in importing other types of oil seeds and vegetable oils such as sunflower, soy-beans, palm, and others, which we import partly from CMEA countries, and partly from third world countries. A certain role in the international division of activities within the Council for Mutual Economic Assistance is played, especially in trade contacts with the Soviet Union, the German Democratic Republic and Czechoslovakia, by exports of Polish vegetables and certain fruits, as for example strawberries. This country has great possibilities for increasing export production of such vegetables as cucumbers, cabbage, carrots, red beets, lettuce and others, both fresh and pickled, preserved

concerns animal production, Poland specializes in export of young livestock, slaughter cattle, meat preserves, especially tinned ham and shoulder, poultry and eggs, not to mention many other commodities exported in smaller quantities. It should be noted, however, that specialization within the Council for Mutual Economic Assistance in animal production is by far less developed than in plant production. Nevertheless also among CMEA countries Poland is a specialized exporter supplying, e.g., considerable quantities of slaughter poultry and eggs to the Soviet Union. As is the case in plant production, international division of activities within CMEA will be expanded also in animal production resulting in specialization of separate countries in production of certain commodities of animal origin. In this respect Poland has great possibilities for developing production of young slaughter cattle. This country has one of the highest cow populations in Europe, next to France, the Federal Republic of Germany, and Great Britain (of course, not considering Soviet Union where most of the cattle is in its Asiatic part). Furthermore Poland is continuing to develop production of tinned ham and shoulders, bacon, poultry and eggs, in which fields it already has a firm good opinion on the world market.

The further development in the international division of labour in animal production among CMEA member countries has brought to the fore in the work of the Permanent Agricultural Commission the problem of increasing production of protein feeds.

This problem is extremely vast and requires work coordination not only in agriculture of CMEA countries but also in fisheries, food industry and chemical industry. Concentration of efforts of the Mutual Economic Assistance countries in solving the problem of feed concentrates shortage has become vital due, on the one hand, to shrinkage of the world feed market, and on the other to the prevailing introduction of industrial methods in animal production requiring use of large quantities of concentrated feed.

In connection with the above Poland is interested both in attaining rapid growth of her own production of protein feeds of plant, animal and microbiological origin, and in increasing imports of such feeds as soy-meal, oil cakes, fish meal, and of course grains.

In this way Poland while taking advantage of her potential possibilities of developing agricultural production, is at the same time increasing its share in the international division of labour in food production.

Associate Professor Dr Zygmunt Smoleński, Institute of Agricultural Economy

**PRODUCTION
COMMERCE
COLLABORATION**

An international meeting of rye breeders, organized by the grain section of the EUCARPIA European Association of Rye Breeders; the Institute of Plant Breeding and Acclimatization, Radzików, and Warsaw Association of Plant and Seed Breeding, convened in Poznań from June 18th to 21st. It was attended by about 70 persons from Great Britain, Czechoslovakia, Holland, the German Democratic Republic, the Federal Republic of Germany, Poland, Sweden, and the USSR.

The choice of Poland for the site of this meeting had not been accidental, as this country occupies the second place, after the USSR, as regards area of cultivation and production of rye grain, and the first place — as regards the share of this plant in cultivation. Although the rye cultivation area dwindled in Poland from 5 million hectares in the fifties to 3.5 million hectares at present, yet Poland's climate and soils present great prospects for rye cultivation. New high-yield and lodging-resistant varieties have been developed here. One of them, the **Dańkowskie Żłote**, occupies more than 60 per cent of the rye area in Poland; it has also been widely introduced in the German Democratic Republic and, of late, also in Romania.

The program of the meeting included visits of two rye-breeding centres in Poznań province: the Rogaczewo Plant Breeding Station, Choryń, and the Smolice IHAR Experimental Department; and three-day debates in Poznań.

POZNAŃ INTERNATIONAL MEETING OF RYE BREEDERS

About 50 papers and communications were submitted at the 5 subject sections, bearing on:

- inbreeding, masculine infertility, and heterosis;
- rye breeding genetic sources;
- new prospects in cultivation;
- rye cultivation aiming at grain improvement;
- cultivation of fungi-resistant rye grain.

A general discussion on international collaboration in rye breeding terminated the meeting. A number of important motions were brought up during this discussion; items: organization of international European experiments with new rye varieties; better organization of seed material exchange (especially of the dwarf and short-stem varieties); convocation of the next meeting of the same kind within the next 3—4 years in the German Democratic Republic.

After termination of the meeting a part of the participants arrived in Warsaw from where an excursion was organized on the 22nd of June to: Radzików Institute of Plant Breeding and Acclimatization, and Laski Plant Breeding Station.

The results of investigations referred to in the papers, and also mentioned in the discussion, and the new breeding methods seem to indicate that rye is becoming a modern plant, of high yield potential, and that it adapts well to mechanical cultivation methods.

Rye grain has high nutritive properties. Its suitability for milling and baking, and also its feed qualities might be considerably stepped up by means of appropriate breeding. Visitors from abroad assessed highly the standard of cultivation work at the Centres they visited, as well as the organization of the meeting.

There have been suggestions to make of Poland the pilot centre for coordination of European cooperation in rye breeding.

From fields, forests and meadows

Production and export of Polish grains

Exporter — Rolimpex

To secure an adequate grain supply is crucial for solving the food problem in the world. Even though world production reaches record figures and steadily grows, stocks keep dwindling and prices soaring everywhere. World grain stocks have now reached the lowest mark in history, while the demand is strongly on the up-trend. Even if it is assumed that grain production in the world will reach a record level this year, there is not much hope for replenishing world reserves over the 1974/75 season. The higher demand for grain combined with the dwindling number of exporters entirely changed the former grain market balance. The record-high prices are no longer a stimulus for exporters who announce exports lower than last year's.

In view of this situation it becomes crucial for Poland not only to curb imports by means of higher yields, but also to take advantage of the favourable situation in exports of grains whose high quality will permit to get high prices. Grain production has been extremely dynamically developing in Poland over the past few years; the yield increase per hectare doubled in the past two decades; that increase has been specially fast in the case of rye and barley.

Yields per hectare

	1950	1960	1965	1972
wheat, rye, barley and oats, jointly	12.7	16.1	19.2	24.2
of which: wheat	12.8	16.9	20.6	25.1
winter wheat	13.2	16.5	20.9	25.1
spring wheat	11.9	18.2	19.1	25.5
rye	12.8	15.4	18.4	23.0
barley	12.9	18.3	21.0	27.1
winter barley	12.2	15.5	20.6	24.3
spring barley	13.0	18.5	21.0	27.1

Introduction of new varieties, intensive fertilization, better work organization, and improved farming permit to anticipate further progress.

The structure of cultures still largely depends on traditions; moreover, it is determined by the climate and soil type. Poland's principal grain is rye; wheat and barley come next.

The great increase in wheat production, from about 1,900,000 tons to 5,100,000 tons, with an only slight increase in the production of rye, barley, and oats, illustrates most clearly the present trend in the structure of grain cultivation in Poland.

As the situation is now, Poland is among the world's principal rye producers and, with its 8,000,000-ton crop, occupies the second place after the Soviet Union. This leaves every year a margin earmarked for export.

The Polish rye used for baking has a high 1000 seed weight (up to 73/74 kg), its purity is over 97 per cent, humidity — 13.5 per cent.

Sedimentation rate 110/120 per minute, with average amylogram at 400 level.

Rye germs, which are also exported, are an extremely valuable feed mix component, being rich in vitamins, proteins, and fat. Guaranteed protein content is over 35 per cent, of fat — 8—10 per cent; maximum humidity — 15 per cent.

Poland has long-standing traditions in grain exports. Polish brewery barley is among the most popular on the market. The principal brewery barley variety cultivated in Poland is the "PZHR Barley", obtained in 1946 from the Ackermann Isaria variety.

It meets the following conditions:

1000 seed weight	— 70/71 kg.
purity	— 98%
germination	— 96%
malt extract in dry mass	— 79/80%
seed fraction (over 2.5 mm)	— 11.5/12%

The grain quality is determined under the method adopted by the 1963 European Brewery Convention.

The brewery barley is usually bulk-shipped. On special demand of the buyer it can be packed in 75 kg. bags (net). Barley cultivation acreage is steadily growing in Poland. The principal cultivation areas: Kujawy (Poznań province), and Legnica-Wrocław (Lower Silesia). These areas have the best soil and climate conditions for barley, and they supply 75 per cent of overall Polish brewery barley production. To preserve the purity of barley varieties, planters receive special seeds and fertilizers.

Brewery barley is exported either overland (by railway wagons), or by waterway (barges).

If shipped by sea, brewery barley is consigned at the following Polish ports: Gdańsk, Gdynia, Szczecin, and Kołobrzeg.

The sole Polish exporter of grain is the specialized ROLIMPEX Foreign Trade Enterprise. The reconstruction of the agricultural industry in Poland: increase of production

ment of ROLIMPEX over the past 20 years and high increase in turnover. ROLIMPEX has become a notable trade partner on grain markets abroad where deals in Polish rye and brewery barley really count.

Brewery barley exports, amounting to 200,000 tons annually, find their way principally to Western Europe and South America. Combined with exports of high quality brewery malt, made from Polish barley, exports involve more than 20 countries. The principal buyers are the Federal Republic of Germany, Japan, Brazil, and Venezuela.

The good name of the malt and barley exported has been won by ROLIMPEX not only due to tradition, but also to the high standard of the goods exported. The special quality control system of all export goods in force in

Poland ensures examination of products by a team of top-grade specialists.

ROLIMPEX is not only an exporter. This company takes also part in the work of many international organizations interested in trade promotion as well as in quality protection of the exported articles.

ROLIMPEX is also active member of the FAO Grain Commission.

In the extremely intricate and difficult situation on the world grain market, the increase of grain production in Poland helps to devise solutions that would ensure an adequate supply of grain, and thereby contributes to finding a way out of the world's food shortages.

M. Jarosiński



WIDE CHOICE OF POTATO PRODUCTS AND READY-TO-EAT POTATO DISHES

Poland is the world's second potato producer, after the Soviet Union. Annual potato production in this country is not much below that of the entire EEC. Potato consumption in Poland has traditions going back many centuries; potatoes are a routine addition to meals.

Potato processing developed in Poland already in the second part of the 19th century. The first starch factory was founded in 1870, and that industry developed by the end of that century. In the period between the wars Poland processed about 200,000 tons of potatoes annually.

The development of this processing industry has been particularly dynamic over the past thirty years, both as regards the quantity of potatoes processed, and variety of the final product. At this moment 33 potato industry works process 1,200,000 tons of potatoes a year.

Potato products have a very wide range of application. The basic line is potato meal, a product used both in the foodstuffs and other industries (e.g. mining, metallurgy, paper, and textile). Potato meal is the initial product for making technical starch derivatives.

The potato processing waste is an excellent feed; it also serves as filling agent in feed mixes.

Another very good product obtained at potato processing and finding wide application is starch syrup; it is a very valuable raw material, indispensable in many food industry branches, for example for fruit preserves, alcoholic and soft drinks, and for making ice-cream; moreover, in the confectionery industry, in bakeries, at food and meat processing. The Polish industry has had big achievements in the production of dried edible potatoes and foods made on their basis: potato flakes, semolina, potato cubes.

Potato flakes serve for making instant dishes: potato purée, soups, potato balls, noodles, potato rolls sticks; they are all extremely tasty, with a fresh potato flavour and colour. Moreover, potato flakes are used as a basic product in food mixes.

Also used in food mixes for instant meals is potato semolina.

Potato cubes can come in several sizes, as required; they are the very thing for making various salads. Recommended both for household and restaurants.

Thanks to the modern technology applied, the potato dishes offered by Poland are of top quality in all

spects, especially as regards flavour. A minimum of chemical agents that could have spoiled the taste and appearance of the dish are used in the recipes. The basic ingredient in the food mixes are potato flakes or semolina, potato meal, salt and seasonings (as required).

The dishes prepared from Polish food mixes can hardly be discerned from those made from fresh potatoes — since they preserve all the flavour and aroma of the fresh product, thence their popularity and great demand. They come in a great many varieties called: "kluski wrocławskie", "racuchy", "kluski śląskie", "kluski ruskie", "kluski kaszubskie", "kotlety ziemniaczane", „krokiety ziemniaczane", "placuszki słowińskie", and many others (noodles, croquettes, dumplings). They are readily purchased by restaurants, hotels, cafeterias, etc. Also the refrigerating industry is interested in these mixes; they are subjected there to further processing, formed into ready noodles, croquettes, etc., and supplied to stores as ready frozen products in great demand of housewives.

The dishes prepared from these mixes are served with melted butter or with a sauce; they can constitute the basic dish of a meal, or an entrée served with meat. Moreover, the dough made from these mixes can be used for pies or fillings.

The Polish potato industry makes also very popular crispies, coming either in ready form (they can be then fried in oil), or as powder for kneading into a dough and making crispies of the desired size. The ready crispies come in various flavours: natural, (not seasoned), onion, tomato, etc. They are served with cocktails, or with soup. All products of the Polish potato industry are exported by ROLIMPEX Foreign Trade Enterprise, their sole exporter.

Potato products are usually packed in paper bags. Potato meal comes in 50 kg. bags, either conventionally sealed, or aerated. Potato flakes are packed in paper bags with a wax paper inner lining (20 kg. net weight). All the other products, namely potato cubes, semolina, and food mixes are packed in paper bags from 15 to 50 kg. net weight. The crispy powder comes in 10 kg. net weight cartons. Potato starch is shipped in rail or road cisterns.

ROLIMPEX can supply to order potato product samples, with instructions

POLISH VARIETIES OF EDIBLE POTATOES

The growing of potatoes plays an important part in the Polish national economy. Compared with the total sown area which was 14,714,000 hectares in 1973, the area of potato growing was 2,678,000 hectares. The total yield was as high as 51,917,000 tons in 1973, which gives Poland the second place in the world in potato growing.

For some years now special attention has been paid in Poland, to the development of new varieties. There has been a double purpose: to obtain a high degree of resistance to diseases and pests and of fitness for consumption and industrial processing. That is why the increase of acreage of qualified seed-potatoes, under special supervision of the Ministry of Agriculture, is much in view. In 1974, 34 varieties were regionalized: 5 very early, 4 early, 8 medium-early, 4 medium-late, 13 late.

The following varieties are offered for export: Pierwiosnek, Giewont, Epoka, Narcyz, Krokus, Fionia, Baca, Sowa, Sokół, Osa, Uran, Wis. In 1974 new Polish varieties were initiated: Irys, Alka, Ronda, Pola, Ryś, Narew. The foreign varieties grown exclusively for export purposes are: Bintje, Sintje, Majestic, Pentland, Dell, Grata, Irmgard, Sieglinde. For those interested in Polish varieties here is a short specification.

Pierwiosnek edible, very early, flesh — nearly white. High fertility. Oval or oblong-oval shape.

Giewont edible, early, flesh — light yellow. Round-oval. High fertility.

Epoka all-purpose, medium-early, flesh — nearly white. Oval or oblong. High fertility.

Narcyz edible, very early, flesh — white with grey to cream shade. Round or round-oval.

Krokus edible, very early, flesh — white to cream. Round or round-oval.

Fionia edible, early, flesh — yellow. Oblong-oval shape, similar to that of Sieglinde.

Baca edible, medium-early, flesh — light yellow. Round-oval or oval.

Osa all-purpose, medium-early, flesh — cream to light yellow. Oval or round-oval. Good for production

Sowa edible, medium-late, flesh — light yellow to yellow. Oval or round-oval. Very good for production of chips.

Sokół edible, medium-late, flesh — white to cream. Oval or round oval.

Uran all-purpose, late, flesh — light yellow. Round-oval. High fertility.

Wis edible and industrial, late, flesh — light yellow. Round-oval.

Irys edible, very early, flesh — white. Oval.

Alka edible, early, flesh — white greyish. Round-oval.

Ronda edible, medium-early, flesh light yellow to yellow. Round or round-oval.

Pola edible, medium-early, flesh — white. Round-oval with shallow eyes.

Ryś edible, late, flesh — yellow. Round or oval-round with shallow eyes. Resistant to eelworm.

Narew industrial, late. High contents of starch — over 21%.

POLCOOP — Polish exporter of seed and edible potatoes co-operates with numerous foreign institutions in research on potatoes. Research contributes to determine the fitness of respective varieties in the countries of different climatic zones, therefore with different capabilities of adaptation.

The selective breed growing of potatoes is handled by: The Potato Research Institute, and Potato Breeding Stations of the Plant Breeding and Seed Production Association. The Association is responsible for maintaining the soundness of the varieties, their full use value and original type, as well as for their reproduction to grade SE or below. As to research on Polish and foreign varieties, it is carried out by the National Centre for Research on Cultivated Plants at Słupia Wielka (in the neighbourhood of Poznań).

Research on foreign varieties is carried out, in accordance with the methodology established by EARP, on the material reproduced in Poland once.

For detailed information please apply to the exporter — POLCOOP — Foreign Trade Enterprise.

POLISH CUISINE



Potato Dishes

Stewed New Potatoes

1 kg potatoes, 3 tablespoons fat, a tablespoon of chopped green dill, salt

Scrape the potatoes, rinse, scald and boil for 5 minutes. Pour off the water, put 2 tablespoons of butter on the bottom of the kettle, and 1 tablespoon of butter and the dill on top, salt, cover tightly with a lid and stew on a low fire for 20—30 minutes, shaking it from time to time. A pressure cooker is excellent for stewing. Serve as an addition to the second course.

Potato Purée

1 kg potatoes, 1/2 glass milk, 1 tablespoon fat

Boil potatoes, drain them, pour in the milk, add fat, pound them with a pounder into a fluffy mass or force through a special grinder for rubbing potatoes through. Add two tablespoons sour cream to the milk to improve the taste. Serve with sprinkled dill as an addition to the second course.

Coloured Potato Purée

Divide the potato purée, prepared as above into 3 parts: first — beat in an egg yolk, second — beat in boiled spinach that has been steamed off and forced through a sieve (ca 20 dkg) or the juice squeezed out of raw spinach, and the third part colour with tomatoes (3—5 dkg concentrate). Beat each portion rapidly, arrange a pyramid composed out of the three colours in a salad bowl, garnish with lettuce leaves or use it to garnish platters with meat. Pour melted butter over it.

Stewed Potatoes à la Pologne

75 dkg potatoes, 2 large onions, 5 dkg fresh bacon, 1 clove garlic, 1 glass sour cream, 1/2 glass bouillon, salt, pepper, caraway seed

Slice the bacon and fry slightly in a kettle. Pare the potatoes and peel the onions, slice, mix with the chopped garlic, clove, add half a teaspoon of caraway seed, salt and pepper. Put into the kettle with the fresh bacon. Cover with sour cream (or buttermilk), cover and stew until the potatoes are soft. Serve with lettuce as a second course.

Potato Pancakes

1 1/2 kg potatoes, 3/4 glass milk, 2—3 tablespoons wheat flour, salt, 15 dkg oil

Pare, rinse potatoes, grate on a grater. Put the pulp on a sieve to separate the liquid (or squeeze out in a juice extractor). When the flour (starch) in the liquid sets on the bottom, pour off the liquid and put the flour (starch) into the potato pulp, mix and pour over with boiling milk, mixing quickly, add wheat flour and salt. Heat the fat on the skillet until it is very hot, and put thin pancakes on with a tablespoon. Fry on each side until they are brown and crisp. Serve at once after frying with sugar or sour cream, with bilberries, jam, horse radish, raw vegetable salad, etc. as a second course.

Potato Pancakes with Onions

1.20 kg potatoes, 15 dkg onions, 3 dkg wheat flour, 1 dkg potato flour, 2 eggs, salt, pepper, fat for frying.

Grate pared potatoes on a grater or on an electric grater, add finely chopped onions, flour and eggs, salt, and sprinkle slightly with pepper. Put small thin pancakes with a spoon on hot fat and fry. Serve at once after frying, with a sauerkraut salad.

Pancakes prepared from a potato concentrate (also exported from Poland) require much less work. It is then desirable to add two freshly grated potatoes. Potato dumplings, called "pyzy" can also be made from the same concentrate.

Potato Cutlets

1 kg potatoes, 2 eggs, salt, pepper, 4—5 tablespoons wheat flour, 4 tablespoons breadcrumbs, 8—10 dkg fat

Scrub the potatoes thoroughly, rinse, boil in their jackets, drain and chill. Remove the peelings and force through a grinder. Add flour, eggs, salt, pepper and mix thoroughly, knead like a dough. Form small, long cutlets on a board sprinkled with flour, coat in breadcrumbs, draw a grate with a knife on one side. Fry on both sides on hot fat to a golden colour. Serve with a raw vegetable salad or with a mushroom, tomato, sorrel or dill sauce, with mustard, salad or the like as a second course.

Potato Cutlets with Cheese

25 dkg boiled potatoes, 35 dkg cheese, 10 dkg flour, 2 eggs, 1 tablespoon fat, 1 onion, pepper, breadcrumbs for coating, fat for frying.

Grind the chilled potatoes together with the cheese. Brown the finely chopped onions on fat, add to the cheese, blend in the yolks and flour, add the stiffly beaten whites of the eggs. Season to taste with pepper. Form a roll from the mix prepared, coat with breadcrumbs and fry on hot fat. Serve with a mushroom or tomato sauce and with boiled vegetables or with raw vegetable salads.

Omelette with Potatoes

5 eggs, 30 dkg potatoes, 3 tablespoons grated sharp cheese, half a glass sour cream, 3 tablespoons chopped green parsley, salt and 5 dkg smoked bacon for frying.

Cut up bacon finely and melt. Put the boiled potatoes through the meat grinder or crush in a press, mix with sour cream, grated cheese, eggs and greens until it forms a uniform mass. Salt to taste. Put the mass on a baking tin, amply greased with melted smoked bacon (together with the cracklings), even out the top. Bake putting it into a well heated oven for 10—15 minutes. Serve with lettuce or a raw vegetable salad.

Potatoes with Cottage Cheese au Gratin

1 kg potatoes, 40 dkg cottage cheese, a glass of milk, 5 dkg fat, a large onion, salt, pepper, a tablespoon of fat, a tablespoon of breadcrumbs for sprinkling over of the baking pan, 5 tablespoons chopped chives

Grease the baking pan or a pressure cooker with fat and sprinkle with breadcrumbs. Boil the potatoes in their jackets, pare when cool. Grind the cheese with the milk in an earthen bowl, add the browned onions, cut up into cubes, season to taste with salt and pepper. Slice the potatoes, divide them into two batches. Put one half of the potatoes on the bottom of the kettle or pressure cooker, put the cheese on them and cover it with the remaining potatoes. Smooth out the top, spread the remaining grease on top — sprinkle with bread crumbs and bake in a heated oven or pressure cooker. Serve for dinner or supper immediately after it is baked with sour cream and a raw vegetable salad (green lettuce, or radish salad etc.).

Potatoes Baked with Bacon

1 kg pared boiled potatoes, 15 dkg smoked bacon, 4 tablespoons of grated yellow cheese, a tablespoon of lard, a tablespoon of breadcrumbs salt, pepper.

Cut boiled and pared potatoes into thin slices, sprinkle with salt and pepper, mix in the bacon, cut into thin slices. Put into a kettle or pressure cooker that has been greased and sprinkled with breadcrumbs. Sprinkle grated cheese amply on the top. Bake. Serve with a raw vegetable salad or lettuce.

Potatoes Stuffed with Mushrooms

1 kg potatoes, 5 dkg dried mushrooms, eggs, 2 medium sized onions, 5 dkg fat, 2 tablespoons chopped green parsley, 3 dkg flour, half a glass of sour cream, pepper and salt.

Select round potatoes of equal size, wash, pare and hollow out the centres, then put them into boiling water and boil for several minutes. Boil until soft the hollowed out insides and force through a sieve. Boil the mushrooms, leaving the stock for the sauce. Stew the sliced onions with one half of the fat indicated, then mix with the chopped mushrooms, the potato centres forced through a sieve and the greens. Add the egg and season the stuffing with salt and pepper to taste. Fill the hollowed potatoes with the stuffing prepared, put into a kettle, baste with mushroom stock and stew under cover on a low fire. Melt the remaining fat, blend with flour, dilute it with the rest of the mushroom stock, bring to a boil, add the sour cream, season with salt and pepper. Pour this sauce over the potatoes that are being stewed and stew them until they become soft or bake them in the oven. In this way, potatoes stuffed with cheese, ground with an egg and seasoned with salt and pepper, etc.



polcoop

VISITING THE PRODUCER

Although ancient Greeks and Romans knew nothing about vitamins or mineral salts, nor did they realize that fruits and vegetables contained so much of them, yet they worshipped Demeter the goddess of all crops. Her daughter Persephona spent, by order of the entire winter season with her husband in his underground realm and the spring and summer season — with her mother on the earth.

People of today do no longer worship either Ceres or her daughter. But, instead, they are perfectly familiar with the nutritional qualities of vegetables and fruit. They know what the percentage of various vitamins, proteins, mineral salts is in every kind of them. They even know how to breed them in the dead season.

We propose to our readers to pay a visit at the "Kujawskie" Fruit and Vegetable Industry Plant, Włocławek, as its products will satisfy even the most fastidious among them. Processed fruits and vegetables preserves all the vitamins, mineral salts and proteins of the raw material, and its natural aroma. They are tasty and healthy, because produced according to most modern recipes, prepared and controlled by outstanding specialists; tasty, because only highest-quality raw materials are used for processing. The fruit and vegetables used in our products most frequently come from specialized private producers, or from large state farms. Moreover in some cases certain operations are performed by hand, this being of special importance for the quality at certain production stages of such products the taste of which should be delicate and especially savoury (for example strawberry compote). Young girls in snow-white aprons stand along conveyors and sort the strawberries gliding alongside. Fruits in syrup, juices or pulps from carefully selected fruits must be like ambrosia — the food of gods.

doubt that these products are excellent, — orders keep arriving from our customers abroad. The "Kujawskie Zakłady Przemysłu Owocowo-Warzywnego" (Fruit and Vegetable Industry Plant Enterprise) well known by importers of Polish fruit and vegetable products, is a union of works at Włocławek, Fordon (with branches in Unisław and Nakło), Lipno and Kruszwica (with branches in Gniewkowo and Inowrocław).

— *Is there really no market which does not import your products?* —

I asked Eng. Tadeusz Spychalski Director of the Plant.

— That, of course, is an exaggeration. We obviously do not export to the Antarctic or to China.

— *And apart from that, everywhere?*

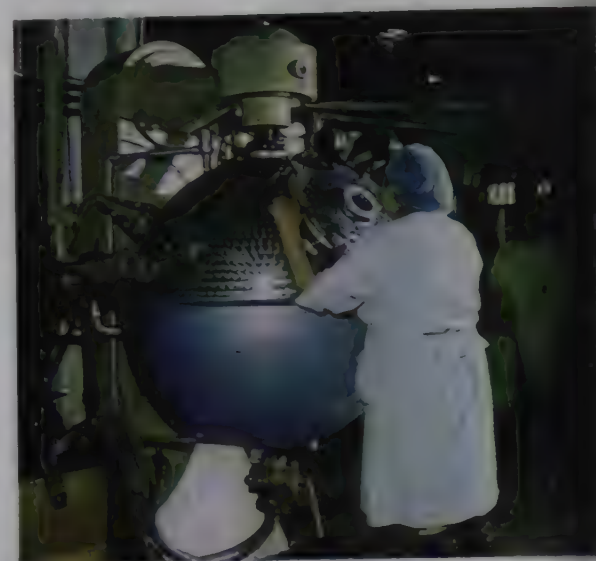
— Apart from that, everywhere. *Could you tell us please* (also Mr Henryk Nadlewski, Assistant Director of the Raw Material Section, Mr Bogumil Daroszewski — exports Coordinator, and Mrs. Alicja Urbanowicz — Packaging Branch Chief took part in our conversation), *what are the favourite lines of the various importers?*

Our hosts mention the United States which imports pickled products: pickled red beets, pickled and pasteurized vegetables such as cabbage (sauerkraut) and cucumbers.

Canada imports the same, plus semi-products such as fruit pulps and mashes, and also fruit in barrels preserved by formic acid; England: the same plus beans and asparagus, fruit in syrup and fruit pasteurized in an isotonic pickle; the Federal Republic of Germany — fruit in syrup and fruit pasteurized in an isotonic pickle, asparagus, vegetable preserves, semi-products; Australia, Kuwait, Ethiopia, Saudi Arabia, Canary Islands — jams and cucumber preserves; Denmark, Holland, Switzerland — asparagus; Sweden — stringless beans, semi-processed products and the Polish "Swedish salad" made of cucumbers popular there; France — semi-process-



1. Fruit sorting



2. Jam cooking



3. Laboratory control



4. Juice bottling

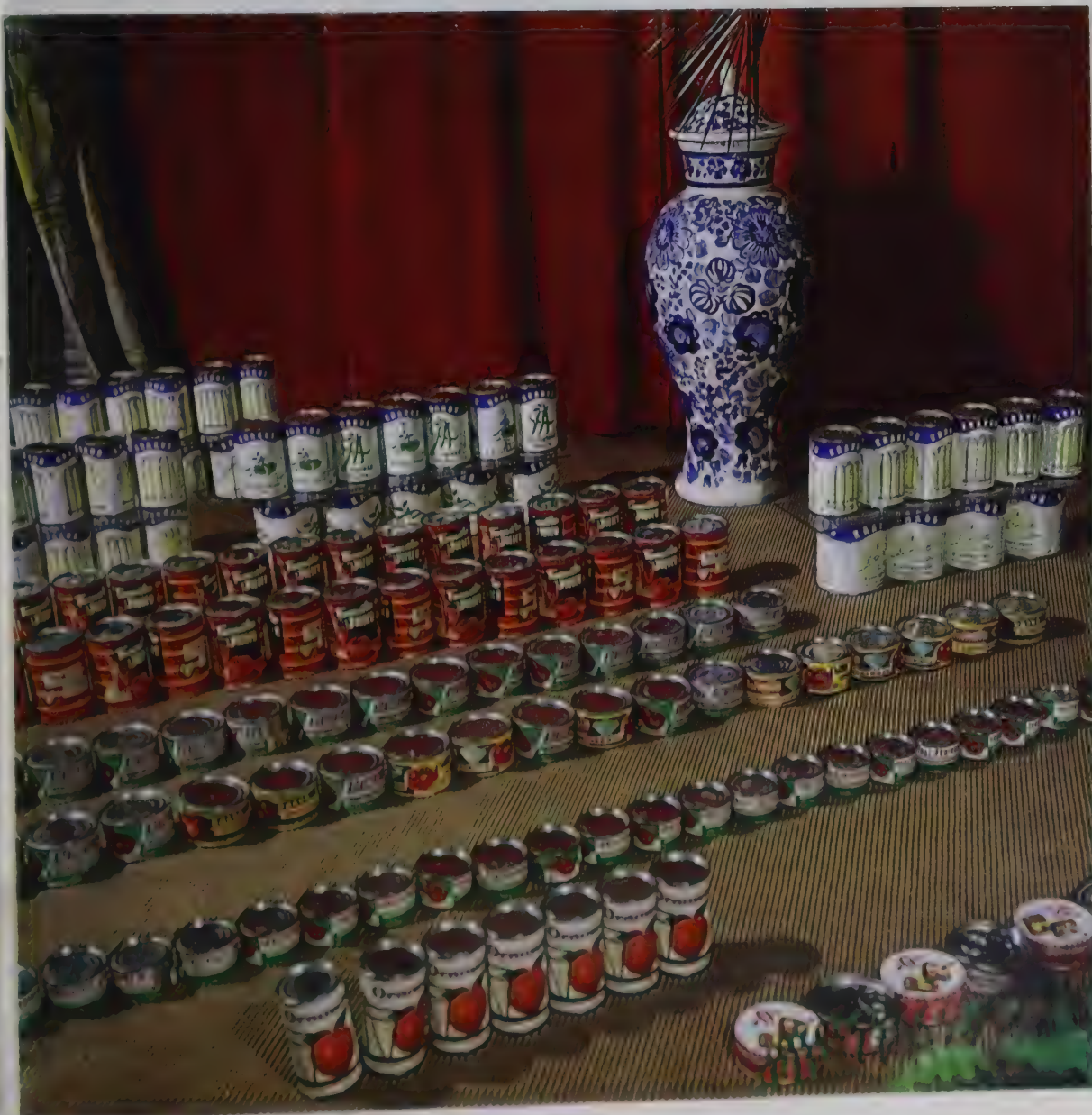
At the "Kujawskie" Fruit and Vegetable Industry Plant, Włocławek



5. Jar-labelling with silk-screen print



6. Ready products warehouse



7. Display of ready products

barrels. We even export sterilized potato preserves to Jordan.

What a wonderfully long list to enumerate. But "time is money" and my hosts are in a hurry to go back to their various jobs, I ask only one more question: *what else would they like to convey to buyers?*

This is what they said:

Director Spychalski:

— The Plant, in addition to the mechanical shops for equipment maintenance has organized its own automation and a measurement centre.

It directs automation of production processes, and specializes in automation of technological processes in other fruit and vegetable processing plants in the country.

Among the automatic equipment for production control installed here, there are units manufactured by English, Italian and American firms, such as Taylor, Maselli, Honeywell etc.

Our Plant is being continuously expanded and modernized. New production branches will be constructed by 1980, including technological refrigerators, lines for the production of fruit concentrates, vegetable-meat preserves, fruit preserves, drinks. A number of branches will be modernized. Thus our production will double by 1980.

Mr Henryk Nadlewski:

— As I already mentioned, our plant gets raw materials from neighbouring plantations, on the basis of contracts. These plantations are under the supervision of a staff of specialists of the agrotechnical service. In order to obtain high quality materials, rational plant protection measures are observed. Spraying of orchards and vegetable fields is under strict control of the agrotechnical laboratory. Agricultural services watch over the periods of validity in order to eliminate penetration of pesticides into ready products. Our chemical laboratory controls all products prior to shipment. In order to have tasty highly nutritious products, we are in continuous contact with the Institute of Orchards and the Vegetable Production Institute, under the supervision of which we cultivate experimental plots at our suppliers' farms. Special kinds and varieties of materials suitable for processing, and

are thus obtained by selective methods

Mr. Bogumił Daroszewski:

— Exports of our traditional products will double by 1980. We also intend to expand production and exports of vegetable juices, as also start production and exports of new lines.

Mrs. Alicja Urbanowicz:

— Our concern for the high quality and fine appearance of products made us organize a laboratory in our plant, specializing in packagings. This unit is concerned with studies and introduction of modern packagings, especially those of glass and tin-plate, for products sold both at home and abroad. This centre also services the entire fruit and vegetable processing industry in this country.

The Packaging Laboratory cooperates with various research institutes, such as the Fermentation Industry Institute, the Central Packaging Centre, the Institute of Paints and Enamels, the Glass Institute, and with various foreign firms: English, German, Austrian and French, of which Schmalbach, Metal-Box, Stollack and others deserve mention. The work of the Packaging Laboratory enabled the introduction of the Twist-Off type contact caps for jars and bottles, modern pigment enamels, thin tin-plate, and collective packagings of thermo-shrinking foil in the Polish fruit and vegetable processing industry. At present preparations are in progress for the introduction of "Pano" type closings for sterile preserves, "Ring-Pull" easy — to — open caps, plastics packagings, etc.

Thus, thanks to products of the Kujawskie Fruit and Vegetable Industry Plant in Włocławek, one can enjoy vitamin-rich and appetite stimulating preserves not only during the summer season, but in win

Aromatic pasteurized fruit juices

Pasteurized fruit juices are an important item on the list of semi-processed fruit exported by POLCOOP. They are in big demand, especially on Scandinavian markets and particularly in Sweden, as they are an absolutely ideal raw material for production of fruit drinks.

Exports of Polish pasteurized fruit juices have a long-standing tradition and they increase from year to year. This development is certainly promoted by the steadily growing production of fruit juices in the world, especially in industrialized countries. Apart from the principal purpose i.e. production of fruit juices, pasteurized juices are an excellent basic product for making other fruit articles such as: syrups, jellies, wines, etc.

Out of the variety of pasteurized juices exported by POLCOOP, in greatest demand are juices made of black currents, red currants and bilberries. Juices produced of other garden-fruits grown in Poland are also exported, viz. of raspberries, strawberries, morello cherries, as well as those of forest berries: raspberries and blackberries.

Polish pasteurized fruit juices owe their high quality first of all to the good raw material. The fruit used in production is always fresh, has an excellent aroma and flavour, and intense colour. These qualities result from advantageous soil and climate conditions prevailing in Poland. No herbicides or other toxic chemicals are used in fruit cultivation. Owing to up-to-date technology, the fruit keeps its freshness and flavour. This is ensured by quick pressing, decantation, centrifuging and thermic preservation. Thermically preserved juices are poured into sterilized, rubber-stoppered, balloon-flasks. The rubber stoppers are — of course — sterilized, too. The machinery as well as the connectors used in juice factories are made of acid-proof material. Polish pasteurized juices have all characteristics of fresh fruit products. They are free from artificial colouring and preservatives.

Before shipment, pasteurized juices are packed in the traditional, so far irreplaceable kind of packing i.e. 25-litre glass balloon-flasks, made air-tight by means of special acid-proof rubber stoppers. The flasks are protected against mechanic damage by willow baskets and special willow covers.

The quality of pasteurized juices exported by POLCOOP undergo supervision by the Central Board of Standardization, both during production and before shipment.

It is worth mentioning that products, manufactured in Poland from pasteurized juices exported by POLCOOP, get high awards at international exhibitions abroad. So for instance, at the 11th "Sélection Mondiale de la Conserverie", Genève, POLCOOP was awarded four gold medals for four submitted fruit syrups — strawberry, raspberry, black currant, sour cherry. This, apart from the success they meet with in foreign markets, serves to show that Polish pasteurized fruit juices are high-quality products.

M. Derwiński

Excellent vegetable juices

Vegetables, along with fruit, are indispensable in the diet, mainly because of their content of vitamins and mineral salts. They should be served daily, especially in winter and early in spring — the seasons favouring a variety of ailments caused by vitamin shortage. Modern medicine demonstrated the superiority of natural vitamins which outdistance those synthetic, made by the pharmaceutical industry; the latter can merely supplement natural vitamins, but cannot replace them.

Polish vegetable juices are made from top-quality fresh vegetables, cultivated in natural conditions, i.e. without addition of any growth hormones. The rapid and hygienic production process in modern plants fitted out with most up-to-date machines and equipment guarantee that the nutritive value of these juices is almost up to that of fresh vegetables. No chemicals whatever are added to the Polish-made juices. The conservation procedure is solely by thermic methods, namely by sterilization whose parameters are chosen in a way to prevent fermentation of the product and formation of mould, without destroying the vitamins of the fresh juice. No thickening agents or chemical conservants are added, either; no dyestuffs or artificial flavourings. Only natural seasonings are allowed, such as salt, pepper, paprika, and the like, adding zest to the juice. Sugar and natural acids (lactic, citric, ascorbic) are added to some of the juices.

The best way to serve vegetable juices is simply to chill them, or add an ice cube. They can also be used for making soups, either as principal product or condiment. This will spare housewives all the cleaning, peeling and cutting of vegetables. They should not be boiled, to as not to destroy the vitamins contained in the fresh juice.

Another way to serve vegetable juices is to make cocktails with them — with water, milk, kefir or yogurt sprinkled with parsley or fresh celery; such cocktails, well chilled, not only look fine — there is nothing like them to quench thirst, while tomato juice can be used as a base for alcoholic cocktails ("Bloody Mary"). The Polish Canning Industry offers among others, the following vegetable juices:

kind of juice	components
tomato juice	— tomatoes, salt
tomato-cucumber juice	— tomatoes, pickled cucumbers, salt, seasonings
piquant tomato juice	— tomatoes, salt, sugar, pepper, citric acid, onions, paprika.
pickled vegetables juice L-1	— pickled cucumber juice, sauerkraut juice, tomatoes, pepper, seasonings.
red beet juice	— beets, salt, sugar, lactic acid (or citric acid), seasonings
Mixed vegetable juice W-4	— carrots, beets, celery, leek, salt, citric acid, seasonings
Mixed vegetable juice W-5	— carrots, beets, celery, leek, parsley, citric acid, ascorbic acid, seasonings
Mixed vegetable juice W-6 (mild)	— carrots, beets, celery, leek, parsley, sweet paprika, salt, citric acid, ascorbic acid, seasonings
Mixed vegetable juice W-6 (spicy)	— the same, with addition of pepper.

Vegetable juices are packed in tins, of approxim. 420—430 ml., or in bottles of 250 or 330 ml. with metal caps. Both tins and bottles are packed in cartons (24 per carton).

A. Ładyżyński





Our proposal — deep-frozen vegetables

Vegetables, like most farm produce, are seasonal goods, for immediate use. Their freezing permits long storage with hardly any loss of mineral components and vitamins, without changing their appearance or determining the flavour and aroma.

Average vitamin C losses at various preservation methods are the following:

freezing	20—30%
sterilization	45—55%
drying	70—80%

Experiments have shown that freezing vegetables immediately after their picking, raises the vitamin content after defrosting above that in the fresh product, in which vitamin losses are very rapid. Tests show that losses of vitamins in the first twenty-four hours after picking are as high as 36% in the case of stringless beans, up to 23% in unhulled peas, and 34% and 50% in the case of spring and autumn spinach respectively. It is likewise important that vegetables to be deep frozen must be picked in the proper season, and at a proper stage of ripeness. Thus, for example, summer spinach, due to higher temperature in the daytime has a markedly lower content of vitamin C than deep frozen spring and autumn spinach. There are data indicating the dietetic superiority of deep-frozen products. Deep freezing produces changes in protein and cellulose combinations facilitating assimilation by the human body especially of leguminous vegetable and cabbage. Hence also about one third shorter cooking time of deep frozen vegetables, than fresh ones.

Deep freezing increases assimilation of the iron contained in vegetables. According to data, the human body can assimilate only 24% of the iron contained in fresh spinach and 36% contained in fresh string beans, whereas after deep freezing the assimilation level increases to 63 and 61% respectively. These and similar processes taking place in deep-frozen vegetables, and enhancing their dietetic value, have not yet been sufficiently explained from the scientific aspect but their existence is obvious.

Deep-frozen vegetables are a product without any waste parts which — in the fresh product, amount to: 55—75% for peas, 40—50% for celery, 30—45% for cauliflower and spinach, 20—40% for cucumbers and carrots, 20—30% for leek, and 15—30% for stringless beans, i.e. quite substantial quantities.

Specially attractive are mixed vegetables, the composition and proportions of which can be optionally changed. It is of interest to know that mixed vegetables are picked at various seasons and preserved by deep freezing at their best of freshness, without addition or preserving agents or chemicals.

Deep frozen vegetables from Poland come in the following varieties:

spinach	leek
stringless beans	celery
green peas	broccoli
sliced cucumbers	Brussels sprouts
carrots	kohlrabi
cauliflowers	parsley
and various mixed vegetables.	

Frozen vegetables are supplied in various forms:

spinach	— leaf pulp
stringless beans	— 2.5 cm. cuts
sliced cucumbers	— 4 mm. slices
carrots	— 10×10 mm. cubes
cauliflowers	— whole or separate flower parts
leek	— 2 cm. slices
celery	— 10×10 mm cubes
broccoli	— separate flowers
kohlrabi	— 10×10 mm cubes

Special varieties most suitable for deep-freezing are selected for production of frozen vegetables.

Seeds imported from the best-known horticultural firms are in many cases used in production of raw material. Production of deep frozen vegetables in the deep freeze industry is carried out on fully mechanized production lines in continuous operation. Machines and equipment for production of vegetables come from the most renowned world firms. All the fully mechanized technological processes, and, in the new factories (Lublin, Olsztyn, Legnica), even all the auxiliary operations including vegetable picking are likewise fully automated. The production process of frozen vegetables yields a uniform product of high biological and nutritional value, good for long storage. Factories producing frozen vegetables are located in regions where the soil and climate are most suitable for the various varieties.

Frozen vegetables are supplied in polyethylene foil bags of 0.5 or 2.5 kilograms, packed in 10 or 15 kilograms corrugated board cartons. After packing frozen vegetables are stored in refrigerated chambers at temperatures from -22°C to -28°C .

The whole production process of frozen vegetables is supervised and controlled by qualified staffs of specialists: engineers and technicians.

Frozen vegetables earmarked for export, are controlled before shipment by specialists of the Quality Inspection Office for the conformity of their quality with standards and contract requirements.

Foreign trade enterprises AGROS, POLCOOP and HORTEX are the exporters of Polish frozen vegetables.



OUR PARTNERS

The consumption of Polish canned meats is very high



says Mr. Eric Wennerberg, Manager of the AB.O. ANNERSTEDT COMPANY for agricultural products and foodstuffs, and his opinion of Polish meat products on the Swedish market is:

The Swedish market for foods is, according to international experts, a very difficult but interesting one at the same time, for both consumers and trade have unprecedentedly high demands as to quality, while offering high prices and easy marketing. Since 1961 we have been working steadily on adaptation of Polish products to the Swedish consumers' requirements of quick deliveries, quality of goods, and their variety. These have been the key factors in outlining our activities.

A very important matter, which has contributed to the favourable development of sales of Polish meat products over the past few years, has been the compliant attitude of ANIMEX to requirements of the Swedish market.

To give a more concrete idea of our successes let me say that at first, namely in 1961, we had a very modest annual sale to a few buyers only. While in 1973 the sales of canned beef and canned pork reached about 3,500 tons which means that we have been successful in conquering a considerable part of the market both for retail and institutional sales. We anticipate that, in 1974, we will reach by means of further activation of the marketing and expansion of the sales' organization imports of about 4,000 tons of canned products supplied by ANIMEX.

It should be added here that Sweden has a population of about 8 million people only, and this means that the per-capita consumption of Polish canned meats is very high indeed. As a matter of fact, it is by far the highest per-capita consumption in the world.

Among the other interesting products the sales of which in this country are still low, are:

should be made of: fresh and deep-frozen beef, deep-frozen game, and by-products, especially livers.

In order to explain in your magazine how the Swedish market reacts to PEK and KRAKUS canned meats supplied by ANIMEX, we interviewed a number of persons from different circles dealing in foodstuffs in various parts of Sweden. We present below a few of the statements given which, in our opinion, reflect adequately the attitude of our people to Polish products.

Interview with Mr. Gunnar Sörenson, manager of the "cash and carry", department of KÅKÅ AB, Malmö. This company delivers goods to institutions.

What do you yourself, and your customers think about the PEK and KRAKUS canned meats?

— Since they sell well, I have to assume that our customers are really appreciative of Polish products. As for myself, I am of course pleased with products that sell well; moreover, at the occasion of various "try and buy" events organized here, I have tasted Polish canned meats myself, and I know that their quality is really high and their flavour excellent.

What in your opinion do your customers particularly appreciate in Polish products, and what makes them buy, especially those with the PEK and KRAKUS brand, from among the many canned meat brands that you keep on stock?

— I believe that the average buyer of Polish products appreciates above all the fact that they are made from such high-quality materials: both the KRAKUS shoulder, and chopped pressed pork are extremely tender and delicate, and have hardly any fat. We also point out to our retail buyers that Polish canned meats are easily sliced or cut into chunks.

Interview with Mr. Rune Jansson, owner and manager of ICE-HALLEN, SKÄRHOLMEN, Stockholm; the annual turnover of this supermarket is of about 10 million Sw. Crowns.

We can see that you have a great variety of Polish canned meats. What do you think about their sales?

— We have on sale, and sell easily, e.g. the KRAKUS 1 lb. shoulder, and also "Kalops" and "Salta Biten" beef; moreover, "Dillkött" veal in sauce of PEK brand. And, besides, we are testing new lines all the time. Right now we sell easily KRAKUS brand chopped pressed pork in slices and chunks, coming in 6 lbs. cans. Grilled chopped pressed pork is also on its way to become an interesting article at the meat counter. The latest Polish product we are now testing is the vacuum packed, Corni-

Interview with Mr. Bror Lindblad, Manager of AB AM WICKMAN, Eftr., Arlöv, a company specializing in sales of foods to institutions.

How good have your sales of PEK and KRAKUS canned meats been?

— The sales figures have shown for the past 5 years a steady and marked increase, and we are very happy about it. We have been able to maintain this development partly because we took special pains in our work to promote sales of Polish canned meats; and, on the other hand, because we were quick in introducing new Polish lines, and in devising new forms of their sales which — by the way — we have many times discussed with Messrs. ANNERSTEDT.

What were, in your opinion, the principal reasons of success in the sales of PEK and KRAKUS canned meats?

— Since, for many years now I have had daily contacts with many of our regular buyers, I may say that I have much experience in what they appreciate and what they want to buy. We, and our customers, have been successful with Polish products probably, above all, because of their quality which is very even and high. The number of claims, I am happy to say, is very low, and this is a condition for relying on good and lasting sales. Another argument that wins customers is that we can guarantee really good delivery terms. Considering the great variety of products we have available on stock, we have to reduce to a minimum the average storage time of the separate items, so as to keep down storage costs.

In fact, we can obtain delivery of Polish canned meats on the same day we have ordered them, which considerably reduces storage costs.

Interview with buyer, Mr. Nils Johan Jerts, Bromma, held a-METRO-BUTIKEN, Högländstorget, Bromma.

Do you ever buy any of the PEK and KRAKUS canned meats?

— Yes, both my wife and myself we often buy Polish canned meats; we are specially fond of PEK "Kalops".

Why are you specially choosing PEK products?

— Everyone in our family likes the exquisitely prepared "Kalops". What really counts in Polish canned meats is that they are made from an actually pure meat. Moreover, we believe that their prices are reasonable.

Interview with Mrs. Brigitta Bratt, a buyer, granted at DOMUS-BUTIKEN, Alastensgate 26, Bromme.

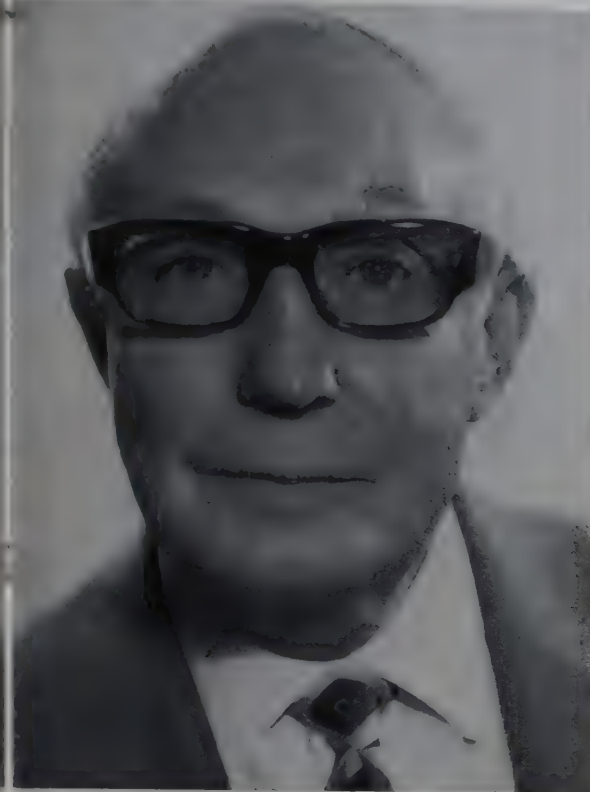
Do you know PEK and KRAKUS meat products?

— Yes, of course; and I buy them often, for the meat is lean and pure.

Do you have any special favourites among PEK and KRAKUS products?

— I most often buy the 1 lb. shoulder, for it is a very versatile product, it can be served in various manners: as main course for the family, or as

SWEDEN



The products are of very high quality indeed...

Conversation with Mr. Thore Hallén, from HALLÉN & RYDBERG AB, Gothenburg, Sweden.

How long have you been representing POLCOOP, the company selling Polish deep-frozen fruits and vegetables in Sweden?

— I am selling in Sweden Polish deep-frozen fruits and vegetables for POLCOOP Foreign Trade Enterprise, Warsaw, which I have been representing only since 1968. I said "only", for I would have liked to have done so from the beginning. Our cooperation is extremely interesting. During the years I have worked with POLCOOP I was enabled to follow the development of Polish trade with Sweden, which had not only been very interesting but also very encouraging for myself, inasmuch as an agent.

What is your opinion of the recent development of Polish exports?

— As a matter of fact, the volume of exports from Poland markedly increased over the past five years; in my opinion the principal reason thereof is that the quality of POLCOOP products has really improved. I have the impression that POLCOOP is doing its utmost to export not only the tasty merchandise, but also goods that are clean, well prepared, and in fine packings.

And what is the opinion of Swedish customers on the quality of Polish deep-frozen fruits and vegetables supplied by POLCOOP?

— It has been confirmed in the international foodstuffs trade that what counts most is the

certain circumstances, yet most of the buyers — those really appreciative of the good name and prestige of the maker — will always prefer to pay a little more and be sure to have a first-quality product. And it also has to be kept in mind that the Swedish market is one of the world's most fastidious ones; and that all Swedish importers are simply assailed by offers of various foodstuffs from all parts of the world.

I am happy to say, however, that I have had many proofs confirming our customers' full satisfaction with the quality of goods supplied by POLCOOP — everybody holds them to be very good, and often even better than similar products made elsewhere.

Every exporter has to meet requirements of markets abroad. Which of POLCOOP's products are in the greatest demand in Sweden?

— Among the lines most popular in Sweden we must mention frozen strawberries, Brussels sprouts, cauliflowers, and cut string beans. Sweden gives preference to products in consumer's packing. I feel sure that POLCOOP goods supplied in that form would sell extremely well. I am partial to rapid, flexible changes in the structure of trade, and I am sure this is also the attitude of POLCOOP. This is why I have no doubt whatever as to the favourable expansion of our cooperation in the years to come.

Mr. Richard Cederlund, Chairman, AGENTURFIRMA AB, Sweden.

— About 15 years ago we started sales of Wódka Wyborowa on the Swedish market.

During the first years we were able to sell relatively small quantities, reaching a turnover of about 2.500 cases annually.

Our cooperation with Foreign Trade Enterprise AGROS had been excellent from the very beginning. It helped us in launching an advertising and publicity programme — a necessity for stepping up the sales.

The result of this propaganda during which our agents did canvassing work throughout this country was an almost tenfold increase of turnover. The WÓDKA WYBOROWA became a very popular drink — either served straight, or as basic ingredient of cocktails. In the mid-sixties we also had the opportunity to introduce the

"Żubrówka", which vodka has been received and duly appreciated in wide circles.

Through participation in numerous trade fairs, and by arranging 'see-and-taste' parties by the Swedish Bartenders' Guild, we have now reached a turnover of approximately 35,000—40,000 cartons per year; this is a rather fair volume of trade considering that the entire population of Sweden is of 8 million only.

We feel happy that the Swedish Monopoly has now decided to permit imports of the "Jarzębiak" Rowan Vodka too; we hope it will be given an equally good reception as the other two brands. We are glad that the regular and close cooperation with Foreign Trade Enterprise AGROS has been so successful; AGROS has always been of great assistance to us. We hope that our mutual relations will continue to follow the same line in the future, too.





The best

Bacon

**from
Poland**



PEK

Krakus

Tala

excellent preserves

Poland is a country of long-standing tradition in cattle and hog breeding and fattening. The adequate utilization of the natural fodder base has been responsible for the availability of top-quality meat.

All the Polish pork and beef preserves are made of just such excellent meat; and it has been their exquisite flavour and taste that has won them high recognition throughout the world.

Export to Sweden which started in 1962 through the intermediary of Messers O. Annerstedt the Stockholm agent have been steadily growing over the past decade. They reached 2,280 tons in 1972, 2,940 tons in 1973; while in the first six months of 1974 about 1900 tons were exported to that country.

Poland ships now to Sweden 15 kinds of pork and beef preserves, in catering and consumer packings. Exported in catering packings are:

- 12 lbs pear shaped ham, of KRAKUS brand;
- 6 lbs 12 oz. pullman shoulder, of KRAKUS and TALA brand;
- 6 lbs chopped pressed pork of KRAKUS brand;
- 6 lbs pork loin, of KRAKUS brand;
- 6 lbs cured beef in jelly, of PEK brand;
- 6 lbs uncured beef in jelly, of PEK brand;
- 6 lbs pressed cured beef, of PEK brand;
- 6 lbs uncured pressed beef, of PEK brand;

All these preserves are pasteurized, the meat is fatless, skinless, and boneless. Their ready buyers are schools, restaurants, hotels, and hospitals. They are usually served sliced.

Very popular and exceptionally tasty are Polish preserves when sliced and grilled.

As regards meat preserves in catering packings, most popular in Sweden is the 6 lbs 12 oz. "pullman" shoulder, of both KRAKUS and TALA brand.

A novelty in the big packings section are the 6 lbs loin and 6 lbs ground shoulder, processed with addition of smoke which imparts to them a specific flavour finding favour with many buyers.

The other export section consists of meat products in

- 1 lb pear shaped shoulder, of KRAKUS brand,
- 430 g. Salta Biten, of PEK brand,
- 430 g. Dill-Kött, of PEK brand,
- 435 g. Kalops, of PEK brand.

Specially popular on the Swedish market are beef preserves in small packings of the "Swedish" type, such as: kalops, Dill-Kött, and Salta Biten.

The recipes for their making were prepared to the importer's instructions, thus being entirely to the Swedish buyers' taste.

The above-mentioned products, together with the 1 lbs. shoulder, are a seasonal set, intended for weekend outings. Principal in this section is the 435 g. Kalops made of beef cut into ca. 4 cm. -long and ca 2 cm. wide pieces; meat content in the can: 230 g.

Equally popular as the kalops is the 430 g. Salta Biten (meat content in the can 220 g.), and the 430 g. Dill-Kött, (meat content in the can 210 g.).

Among the beef preserves exceptionally tasty is the Dill-Kött — made from young cattle meat with addition of a sauce consisting principally of powdered milk and dill. All the consumer-packing preserves are sterilized and can be stored at room temperature.

Specially noteworthy is the fact that the Polish pork and beef preserves exported to Sweden contain no polyphosphates, but only natural curing agents.

The high quality of Polish meat preserves, their excellent flavour and juiciness, made them extremely popular with buyers in Sweden.

It is of interest to note that more than 50 per cent of the pork and beef preserves imported by Sweden come from Poland.

This success is fully due to the high quality of Polish meat preserves which made them win the Swedish market.

Buy PEK, KRAKUS and TALA brand Polish meat preserves exported by ANIMEX, and you will find out yourself how good they are.



Tasty

and lasting!

BEST MEAT PRODUCTS from Krotoszyn

The Krotoszyn Meat Plant, ranged among the best in Poland, has been an exporter for nearly 30 years. It makes a variety of meat products, the principal among them being: bacon, canned ham and smoked meats. The buyers are West European countries and the United States of America.

The best known export item of the Krotoszyn Meat Plant and the first exported by it is bacon — sold to Great Britain. Instead of the former carcass halves, smaller cuts are exported of late, which has met with the buyers' approval. The Krotoszyn Bacon Department supplies 38 per cent of all the bacon exported from Poznań province; this amounts to a big share of overall Polish bacon exports of which that province sells one-third.

The Krotoszyn plant, specializing in several lines, has its branches in several localities. Krotoszyn has a slaughter-house and separate processing facilities; other slaughter-houses (for cattle and bacon hogs) are located at Ostrów Wielkopolski, and bacon works at Kępno — an area known for its big hog population.

The Krotoszyn Plant exports to the United States of America, Great Britain, and to the Federal Republic of Germany: canned ham and shoulders (accounting for one-fourth of their exports from Poznań area); and certain traditional preserves: goulash, ground ham, pork and beef in gravy, and smoked meats.

This plant produces two out of the four exported kinds of smoked meats produced at factories subordinated to the Voivodship Meat Industry Enterprises, Poznań. The **Beskidzka** and **Dębowiecka** sausages are semi-dry; they are ranged in the 4th (high) group, being made of top-grade pork, which accounts for their quality. The fat content in them is low, which makes them very popular in Great Britain.

The Krotoszyn Plant is now to make two other kinds of sausages, of a composition similar to the other two, and of an almost identical flavour, but their production is somewhat cheaper without, however, affecting their quality. Their names are **Kolska** and **Warszawska**.

Besides Krotoszyn, other processing plants subordinated to the Voivodship Meat Industry Enterprises, Poznań, produce smoked meats for export. Poznań supplies the "Tuchowska" and dry **Krakowska** sausages. We asked Engineer Józef Cyranek, Chief Technologist of the plant, for their characteristics:

The **Tuchowska** is a semi-dry sausage with a specific flavour for which an appropriate combination of spices is responsible. It is sold to Great Britain. The dry **Krakowska** sausage enjoys an excellent name on markets abroad. It keeps exceptionally well. It is vacuum-packed in plastic bags, which makes it stay fresh even longer. Exported to the Federal Republic of Germany.

One more kind of smoked meats is exported from Poznań province: hashed sausage, made at Gniezno

works, a semi-dry product, of a diameter up to 100 mm., making it specially suitable for sandwiches. Exported principally to Great Britain".

There is absolutely no exaggeration in this opinion of a specialist. The smoked meats from Poznań province are of high quality, of excellent flavour, they keep fresh. No wonder that, until recently, only plants from Poznań, Bydgoszcz and Gdańsk provinces had the right to export meat products. The first two — because of the long standing hog breeding and meat processing traditions; the latter, on the other hand, has another asset: the vicinity of ports. More than 30 per cent of the meat products exported by Poland were supplied by Poznań province. These proportions have changed of late, as also meat plants from Poland's eastern provinces, those of Lublin and Białystok, have joined the exporters. However, the distance to the countries of Polish meat products buyers is the shortest from both Poznań province and Pomerania; and this must be considered at the transport of the ready product. Moreover, these provinces have available the best raw materials for ham, bacon or other preserves, with their big hog and cattle populations; they have also much experience in breeding (best breeds and cross-breeds), which results in production of the extra and first class bacon, ham, etc.

This is why modernization of Poznań province meat plants is continuously in progress; Krotoszyn slaughter-houses and processing works are among the thoroughly modern ones.

Replacement of the old equipment by new stainless steel installations, either imported or home made, ensures both more and better final products, under observance of all wholesome food regulations in compliance with requirements of buyers abroad. Contract provisions enable importers of Polish meat products to inspect production conditions in the plants they are customers of. Thus, at Krotoszyn for example, one can often meet representatives of American importers and of the US veterinary supervision service.

The Krotoszyn Plant, where production of top-grade lines prevails, has available "Multiwag" packing facilities, packing the ready product in small plastic bags.

Also responsible for the high quality of Krotoszyn products is its staff, composed in a great part of long-time experienced workers, who had been trained for their profession at the schools run by the plant: the three-year Basic Vocational School, and five-year Meat Industry Junior College.

The Krotoszyn staff is among the best in Poland's meat industry; it has won the challenge banner of the Council of Ministers and the Central Trade Union Council for participation in the 1973 competition. While in the all-Poland "Good Job" competition it had been third among all the Polish meat processing plants.

FISTOL



**GNIEŹNIA
BOONKAMPA**



**gnieźnieńska
gorzka żołądkowa**

Bitter vodka relieving stomach troubles, made
according to an old recipe from Gniezno

VODKA

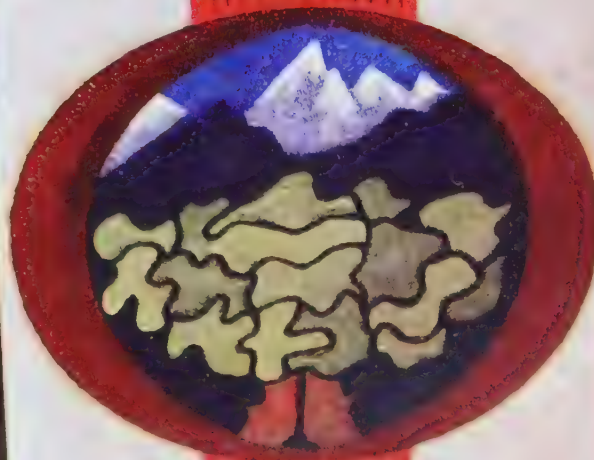


Polmos

TATRA

VODKA

Tatrzańska

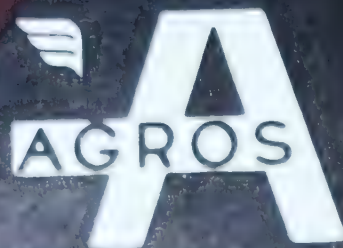


PRODUCE OF POLAND

45°

0.5 L

THE
TATRA
VODKA
IS A POLISH
SPECIALTY

AGROS

GNIESNANIA — — BOONEKAMP

Herb liquors have been enjoying quite a popularity for some years now. They have a pleasant taste, they are full of flavour and ... act as a digestive.

Usually these liquors are taken prior to meals although there are some people who will have a sip of Boonekamp during their meal. Among the numerous kinds of herb liquors there is also the Polish -made Boonekamp GNIESNANIA. (gnieźnieńska gorzka żółdkowa). In Poland they say that it does not only taste well but it also... cures. An extract of over twenty herbs and roots, which makes up its base, helps to digest and warms up. GNIESNANIA is produced to a very old recipe from Gniezno, the first capital of Poland; it dates back to the 13th century. One can read about its origins in old chronicles. It is said to have at first been a medicine, becoming a liquor later on.

SMAH'S TATRA VODKA

Another herb liquor which we present here is SMAH'S TATRA which is really warming up and full of flavour. Its origin is quite a story.

It was not a very long time ago when, on a certain bleak winter evening, a few foreign and Polish tourists were on their way back to Zakopane from a trip in the mountains. Tired and cold, they were quite unhappy about their way home which

dusk when they noticed a light in a highlander's hut and decided to go in to warm up and, first of all, to rest a while.

The highlander, a shepherd seeing weary tourists brought a demijohn of some liquor which he had made himself on the base of local mountain herbs and he treated his guests to it. The delicate greenish drink of a very special flavour warmed up the frozen tourists very soon. Their fatigue caused by many hours of walking and climbing disappeared too and, after expressing their thanks to the hospitable shepherd, the tourists went back to Zakopane feeling refreshed and heartened up.

They did not forget the drink which added to their strength. The story of the unusual qualities of the liquor reached experts from the Spirit Industry, Kraków which in turn got the recipe from the shepherd from Zakopane; he also showed them the herbs he and other local people had been using for many years to make it. Since then SMAH'S TATRA vodka has been produced by the Spirit Industry, Kraków, and for three years now it has been offered for export by AGROS as one of the specific flavoured dry brand vodkas.

SMAH'S TATRA is a liquor based on the ARCHANGELICA OFFICINALIS mountain herb and double distilled extra fine spirit. SMAH'S TATRA is taken cooled and, due to its qualities, it can be served both in winter for warming up and in summer when it acts refreshingly. Besides, SMAH'S TATRA is an excellent component of long drinks when mixed with tonic water, Lemon Bitter, and even Ginger Ale.

*Why not try it for yourself?
Here is to you and your*



TATRA-DELIGHT

2 oz Tatra-vodka
1 oz Cinzano Vermouth
Dash of rum
Pour over ice cubes in
Old Fashioned glass
Garnish with a slice of orange

BLUE-MOUNTAIN

3 oz Tatra-vodka
1 oz French (dry) Vermouth
1/2 oz Orange juice
Shake with cracked ice
and strain into sour glass

TATRA-TONIC

1/3 Tatra-vodka
2/3 Tonic Water
Dash of Bitters
Put two ice cubes in highball glass
add vodka and bitter
fill with Tonic and stir
Serve with twist of lemon peel



POLISH VODKA

sold all over the world

The Manager of the Department of Spirits and Tobacco Monopoly and Confectionery Products is Mr. Henryk Poniewierski.

What does this name actually imply?

— This name, which implies sweetness and fragrance seasoned by a hard drink simply means that our office has the monopoly of sales of a variety of confectionery and tobacco products, and of alcoholic drinks: vodkas, wines, beer, and meads.

We would like to hear something more about each...

— The Polish confectionery industry supplies excellent chocolate products: candy, chocolates; further, a variety of biscuits, and many other items. AGROS exports them to Middle East countries, to African countries, to the United States and Canada and, of course, also to certain European countries: the Federal Republic of Germany, Great Britain, Austria, the Scandinavian countries...

A big section of this Office's export is tobacco. We have very good tobacco qualities: light — Flue Cured Virginia, bred from American seed acclimatized in Poland, half of which is exported. Very popular too is the dark tobacco, e.g. Havana Air Cured, Air Cured Skroniowski (from French tobacco seeds), or Fire Cured Kentucky.

And, as to beer: its tradition goes back to the 19th century; exports started early in this century. The biggest brewery, exporting the "Żywiec-Pilzner", is the Brewery at Żywiec, built in 1856. We also export Okocim and Wrocław beer. AGROS sells beer to 30 countries throughout the world. Polish beer was awarded many medals and diplomas for its high quality. This year we began exports of a new kind of beer, KRAKUS, from Żywiec Brewery; it is of the Rignes and Heineken kind.

The high nutritive value and excellent flavour of Polish wines and meads have made them very popular with buyers abroad. They are exported to more than 20 countries. Most popular among the exported Polish wines are: Rycerskie (Cherry wine), Złoty Róg (Bilberry wine), Truskawkowe (Strawberry wine), Goliath (Black Currant wine), Janczar (Red Currant wine), Zbójnickie (Gooseberry wine), Klasztorne (Herbs wine), Zamkowe (Apple wine); and, among the meads: Wawel, Staropolski, Maliniak, Millennium, Babunia, Nadwiślański.

But it is probably Polish vodkas that are most famous?

— Yes, indeed, and they have a well-established name abroad; they find ready buyers both in Europe and overseas. Polish vodka has been famous as early as the 14th century. The principal vodka-distilling centres in the Middle Ages were Gdańsk, Kraków, and Poznań. That in Gdańsk was by far the biggest: early in the 17th century there were so many alcohol distilleries there that the fuel needed for them was getting short. Even then Polish vodka had been well known in Petersburg, Vienna, Wrocław...

At present, in addition to the world-famed Wódka Wyborowa, AGROS exports a variety of clear vodkas: Krakus Vodka, Luksusowa (Luxury vodka), Baltic Vodka, Vistula Vodka (Pure neutral Spirit) Extra Żytia Vodka, etc., and many flavoured ones, such as Żubrówka (Bison Brand Vodka), Jarzębiak (Rowan Vodka), Soplica (Dry Brandy Vodka), and those matured: Starka (Very Old Vodka), Winiak Luksusowy (Polish Brandy), Jarzębiak on Winiak (De Luxe Rowan Vodka blended with old brandy), etc. Evidence of the high quality of Polish vodkas

And where do we find customers?

— AGROS exports vodka to 70 countries on all continents. It is well known and highly thought of by our neighbours; the Scandinavian countries, Sweden above all, are the regular buyers; vodkas steadily gain popularity overseas, both in North and South America. Of course, the pride of place goes to Wódka Wyborowa.

What has been responsible for the popularity of Polish vodka?

— First of all its excellent quality; further — tradition; and also the steadily improved production technology. It is made from top-grade natural materials, from finest grain varieties. The alcohol is repeatedly rectified; it is several times filtered through a special kind of charcoal. Very important, too, is the kind of the water used. And, finally, Polish vodka leaves no hangover. It can be taken before meals, at meals, and after them — whatever the condition. Let us quote Picasso who said that the things most astounding over the past 50 years have been: **blue colour, cubism, and Polish vodka.**

Does fashion change in drinking habits too?

— Very much so. Fashion changes not only in songs or clothes; it also affects drinks, and drinking habits. Observed of late, for example, especially among young people, is the habit of having clear vodkas, used as basic ingredients in long drinks and cocktails. Let me give you some recipes for the four most popular long drinks made with Wódka Wyborowa.

What are the publicity methods we resort to?

— We use a variety of publicity forms, such as: advertisements in dailies and professional magazines; promotion campaigns; participation in congresses and conferences; competitions and "try and buy" ventures; exhibitions and bazaars; publicity materials; visual advertising such as neons, show cases, posters, and the like; on the radio and TV, special films. Among the most attractive publicity forms are prizes in competitions for the best salesman, in the form of gifts from Poland, or of a short visit in this country.

Has any other Polish vodka, besides the Wódka Wyborowa, won such great renown?

— Many of our vodkas enjoy a well-deserved success, such as Specjalna Żytia (Special Rye Vodka), Krakus Vodka, Starka (Very Old Vodka); but, along with Wódka Wyborowa, quite special has been the success of Żubrówka, (Bison Brand Vodka), the Polish 40° flavoured vodka, made with a special grass that makes the delight of Polish bisons. Żubrówka has a pale greenish colour, delicious flavour, and pleasant aroma. Its specific feature is the blade of grass added to each bottle. Connoisseurs think high of Żubrówka. Its qualities have best been described by English novelist, Somerset Maugham, who wrote in his "Razor's Edge": "it smells of fresh hay, spring flowers, thyme, lavender; its flavour is so mild and smooth on the palate, and so wonderful as listening to music in moonshine".

What is, in your opinion, the outlook for Polish vodkas?

— We feel sure that the clear vodka trend will prevail for many years to come. Our exports grow year by year, we win more buyers, the demand is on the increase — all in all, prospects are bright. And, moreover, whoever has once tasted Polish vodka and liked it, will stick to it for keeps.

MEAD CATALOGUE



Wawel

belongs to the group of fruit meads type "trójniak" with an alcohol content of 12 to 14%.

This mead is made from bee honey (July honey and acacia honey) with the addition of suitable kinds of pasteurized fruit juices (apple, hip rose and blackthorn juice) which enables to impart to it, apart from the generous taste, full nutritive properties as a result of the increased content of vitamin C.

During the process of production this mead is aromatized by means of herbs, among which predominate hop and juniper. The obtained aromatic bouquet accomplishes this splendid mead, which recipe comes from the Royal mead factory, the oldest in Poland, Royal Castle "Wawel" in Cracow — the old Polish capital.



Millennium

is a mead produced specially to mark the millenium of the Polish state, and is distinguished by its superb taste and bouquet. A combination of natural honey and strawberry juice, after an extensive technological process involving long-term maturing in cellars, results in an amber coloured beverage of unsurpassed taste and aroma.

The "Millennium" mead is a subtly harmonious blend of flavour, aroma and colour.

A glass of "Millennium" mead induces a feeling of well-being.



Maliniak

honey drink (mead), dark amber-coloured, is distinguished by a delicate taste and subtle aroma.

This mead is produced of high-quality bee honey and fresh raspberry juice.

Maliniak is given a thermic treatment which results in its specific refined taste.

Maliniak is delivered in cartons containing 12 glass demi-john type bottles or 12 earthenware jars à 0.75 ltr.



Staropolski

is the name of mead with a particularly fine taste.

Selected varieties of natural honey undergo the fermentation process and after treatment according to traditional Polish recipes and long-term maturing provide an excellent golden beverage which distinguishes itself on account of its honey taste and aroma.

The "Staropolski" mead gained a medal and a diploma at the Second World Olympics of Wines, Alcohols and Liqueurs held in Luxemburg in 1965.



Nadwiślański

is a mead blended with cherries. It has a unique honey-and-fruit flavour. The aroma of the Polish cherries and the natural honey combine into a superb bouquet during the maturing process. Its clear red colour and its delicious taste will satisfy the most discerning palate.

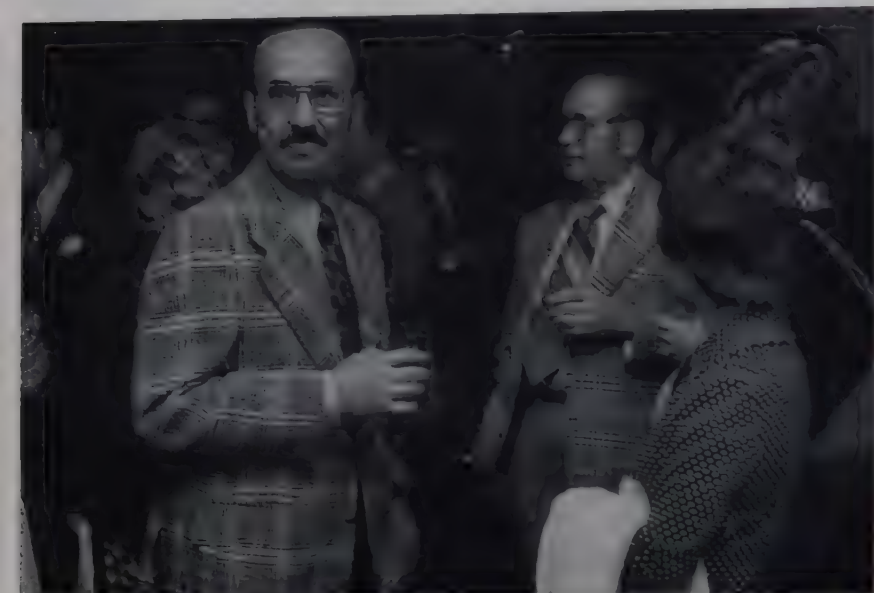


Polish products

known
in the word

A meeting in Warsaw

They have crossed the Atlantic to come here. They represent various types of firms and advertising agencies dealing in ham sales all over the United States. After a several days' trip across Poland, having visited places of interest and ham producing meat factories, they had a pleasant meeting at the Warsaw FORUM hotel with members of the "Polish Ham Fans Club". At this opportunity honorary membership diplomas beautifully made out on hand-made paper were distributed.



Mr Fred Conrad from Southeast Foods, who sells Polish ham in the South East of the United States, claims that Polish ham sets the world standard. He says that customers praise Polish ham mainly because of its specific flavour and excellent taste and particularly because it is exceptionally lean. Thanks to it for many years now has become a staple product on the American market. This was the first ham that was imported to the United States. It was packed in tins and this kind of tins was named "ham Polish style". At first they were bought mainly by customers of Polish origin. Now Polish ham has won a widely acknowledged popularity.

You have visited the meat factory in Tarnów which makes ham. What is your opinion as a specialist in this line and what are your impressions from that visit?

— We stayed there a very short time and thus my remarks can only be very brief for I can not offer a proper estimation. However, the first impression is important and it is decidedly a positive one. The factory is clean, the work effective and first of all the people are nice. You would like to work with them. They know their job and like it.

What is your opinion on the effects of sales of Polish ham in your area up till now and how do you see their future?

— Over the last two years the sales on my territory went up — through my firm — nearly five times. In 1973 our turnover in Polish ham amounted to ca 12 million US dollars. It is the result of proper publicity as well as seeking customers by means of small packings which are more desirable. Yet I think that Polish ham could still sell better, both in small packings and in big tins.

Mrs Helen A. Miller from I/D Products Co. Chicago has come to Poland for the third time. She started selling Polish ham many years ago. Nowadays she deals in it over vast Middle West territory including such important centres as Detroit, Chicago, Cleveland, Kansas City.

What are the prospect of Polish ham sales on the American market?

— I believe that they are good if the good quality which

market a lot depends on advertising. Therefore I keep using various types of advertising in the dailies, in supermarkets, mainly in the form of leaflets, folders, but also by organizing shows and "see-and-taste" events.

What is the opinion of customers about Polish ham? Have you had an opportunity to contact any of them personally?

— The best opportunity for it are personal contacts with buyers and various formes of social meetings when you can hear the opinion of the family or friends. And I should admit that, in my community, Polish ham is an indispensable item on the table. So it is sometimes with embarrassment that I listen to favourable opinions although I must say that is a rather common feeling.

Mr Bernard Deutchman, vice-president at Atlanta Products Corporation can say a lot about Polish ham since his organization distributes ham worth 82 million US dollars a year (1973 results), being the main distributor of Polish ham.

How can you estimate the growth of this export over the years of your activities?

— Business has developed nicely, customers ask mainly for lean ham even at the expense of flavour and taste. In 1960 we still had skin on Polish ham and beneath it a thin layer of fat. This gave it an exceptionally characteristic taste. But gourmards — connoisseurs had to surrender in the face of demands from the common customers who wanted ham lean. And we had to give up ham with skin. Then new demands came connected with the necessity of introducing smaller packings which involved investments to organise the slicing of ham and selling it in small portions. I think that due to the renown gained by Polish ham we can maintain in future its position on the American market. Judging by the visit we have paid at Polish meat factories, an ever more up-dated Poland's industrial potential will allow — in food industries — for maintaining and improving qualities of Polish raw materials. So I am convinced that there will be more and more amateurs of Polish ham and that the "Polish Ham Fans Club" will acquire new members and sympathizers.

EXHIBITION OF POLISH ACHIEVEMENTS, MOSCOW

A big Jubilee Exhibition of Economic Achievements of the Polish People's Republic, organized in connection with the 30th anniversary of Poland, was held in Moscow in the time from July 18 to August 18, 1974.

The display, which covered an area of several score square metres, presented the principal achievements of all branches of Polish economy by means of 7500 exhibits.

Agriculture and the foodstuffs industry were represented in Moscow by AGROS, HORTEX, and POLCOOP Foreign Trade Enterprises which displayed a wide range of fruit and vegetable preserves, juices, jams, tobacco products, fresh fruit and vegetables; and also a great variety of cut flowers regularly shipped from Warsaw by air. Moreover, AGROS presented a wide choice of sweetmeats (mostly bonbons), fruit wines, beer, and vodkas.

There have also been many special shows and "try-and-buy" ventures, specially organized during the Exhibition weeks; of particular attraction to visitors was that organized by HORTEX — offering all the frozen fruits produced in Poland.

POLISH DISPLAY AT THE DALLAS CONVENTION

The American Super-Market Institute has for a few years now organized annual food conventions in Houston or Dallas, Texas. This event is a meeting place for various firms from different countries, and is combined with an exhibition enabling exhibitors to exchange experiences and to find out about novelties in the food industry.

For the past two years this event has been held in Dallas. The 1974 Convention lasted from May 5 to 8. Presented at it were: food industry products, machines for food portioning and packing, various items facilitating preparation of food: juice squeezers, mixers, coffee percolators, certain industrial articles such as milk bottles, food heaters, etc.

The event aroused great interest both among American and foreign firms.

As regards participants from abroad, worth recording is the French exhibition with a big stand of alcoholic beverages and cheeses; that of Denmark, presenting a variety of meat preserves, either canned or sliced and pre-packed, cheeses, and ready-to-serve dishes, and alcohols; the display of the Federal Republic of Germany which brought cheeses, meat products, ready-to-serve dishes, sweetmeats, and alcoholic drinks (beer and wine). Poland's ANIMEX (the Foreign Trade Enterprise) had its exhibition within the ATALANTA Company's general stand called "Atalanta's International Food Village", located at the first exhibition level.

The ANIMEX stand faced the main entrance to the exhibition hall and was designed in the old country style.

ANIMEX displayed hams and meat preserves of the "Krakus", "Atalanta", "Polka", and "Tala" brands. A hostess in Kraków region folk costume offered snacks of Polish ham.

The stand was provided with a variety of publicity items: leather pendants with the ANIMEX trade mark; plastic lapel pins with the "Gold Mercury" — the European award won by ANIMEX for its total scope of export operations; and "Polish Ham quick'n easy recipes", prepared by Mrs. Peg Bracken.

In addition to ANIMEX produce, AGROS displayed



POLISH EXHIBITION IN WEST BERLIN

An exhibition of Polish Export Goods (Exportausstellung der Volksrepublik Polen, Messegelände am Funkturm Westberlin) was organized in West Berlin on May 3—12, 1974.

It was attended by 30 Polish foreign trade enterprises. Agents of AGROS, ANIMEX, BALTONA and CEPELIA organized, moreover, special sales boutiques.

The principal lines among foodstuffs were vodkas, with Wódka Wyborowa prevailing. Close by, at the AGROS stand, 7 vodka brands were on sale. More than 30 cartons of vodkas were sold during the exhibition (over 750 bottles of 0.5 l. each).

"Try and buy" publicity events were also organized, one of them at the press conference held on May 2 for a hundred journalists, and another at the Schweizerhof Hotel restaurant, where an exhibition of Polish vodkas was also organized; displayed were: Wódka Wyborowa, Żubrówka, Bison Brand Vodka, Krakus Vodka. This last event was attended by hotel and restaurant managers, department store and airline directors; all guests received sets of publicity materials, vodka samples, breloques, and ballpoint pens.

Importers could taste vodkas and beer at the Palais am Funkturm Restaurant. This event had a big attendance, and guests praised both its organization and the drinks and dishes served. At the Polish Fashion Show for journalists, held at the Schweizerhof Hotel, publicity bags were distributed holding vodka, wine, and mead samples, and publicity materials.

The Schweizerhof was also the site of meetings and symposia for businessmen, radio and TV broadcasts, press conferences for journalists from the Sender Freies Berlin. The Berlin press carried much information on the Polish Exhibition, illustrating its articles with pictures of Polish products.

AGRA-74

In connection with the 25th anniversary of the German Democratic Republic, the AGRA Agricultural Exhibition has been organized this year with special care. AGRA is a specialized exhibit, held annually in Markkleeberg near Leipzig. AGRA is an exhibit of agricultural produce, livestock and agricultural machines, an agrotechnical centre. Newest achievements in agriculture, breeding, and agricultural mechanization are demonstrated there.

The exhibit is organized in open space (it is called in the GDR "University in a garden"), and can be visited around the year by those interested in improvements in farming.

AGRA was first organized in 1949, so that it now has a long standing tradition and much experience.

Well provided experimental centres in: seed production, plant breeding, forestry, livestock breeding, land improvement, agricultural chemistry and mechanization are located in AGRA grounds. AGRA organizes displays of pedigree cattle, demonstrates newest agricultural equipment, especially those machines and equipment which are the result of cooperation of socialist countries — members of the Council for Mutual Economic Assistance.

Four hundred exhibitors from the German Democratic Republic took part in this year's exhibition. Achievements of other countries were presented in Pavilion No. 1 housing exhibits from the Soviet Union, Hungary, Romania, Czechoslovakia, Bulgaria, Cuba, and Poland.

Of special interest was the display of the Hungarian People's Republic. The Polish presentation at AGRA-74 exhibition, sponsored by the Ministry of Agriculture, met with great interest of visitors.

TAKON-74

The trade results of Poznań International Fair TAKON-74 were 52.8 per cent up on the last year event. The value of the turnover of TAKON-74 amounts ca 932.5 m exchange zlotys apart from long-term cooperation agreements, the value of which total ca 100 m exchange zlotys.

In the transactions concluded, the share of exports and imports are respectively 743 m exchange zlotys and 190 m exchange zlotys.

All the participants were unanimous in the opinion that this time they obtained better exhibition premises. Also conditions for holding talks and concluding transactions were eased off. 3 thousand exhibitors took part in the Poznań event including those from abroad — over 1500 from 34 countries.

TAKON-74 represented a considerably wider range of exhibition as compared to 1973. Thus its programme comprised 3 specialized events:

- TAKON — consumer goods,
- INTERMASZ — machines and equipment for light industry, foodstuffs industry, agriculture and forestry,
- TAROPAK — packagings fair.

The offer of foreign exhibitors participating in the autumn Poznań event illustrated the latest achievements in science and technology which were displayed with interest of Polish partners in mind who, dynamically developing the consumer goods industry, are on the lookout for all technological novelties.

As the result of the event Polish and foreign exhibitors concluded numerous mutually profitable transactions; new partners were added and new trade contacts were made.





In the
realm

of flowers



Is there anyone who does not love flowers? Certainly not! One simply cannot resist the charm of these actual wonders of nature. We like to receive flowers, and to offer them — at various occasions, and for no reason at all.

Flower breeding is dynamically expanding in Poland, year by year. Flower exports grow too — they are now 5 times up on 1970!

The sole exporter, HORTEX Foreign Trade Enterprise, exports flowers to Czechoslovakia, the German Democratic Republic, and to the USSR. Businessmen in the United States, Sweden, the Federal Republic of Germany, West Berlin, etc. are also interested in purchasing flowers in Poland.

Polish breeders have specialized in the production of carnations and gerberae. They developed beautiful new carnation varieties, such as: LENA

and SIM. The quality of Polish carnations is highly assessed, as testified by awards and distinctions won at international exhibitions. At the Olomouc 1973 International Exhibition Polish carnations have won gold and one silver medal. At the 1974 Bratislava International Flower Exhibition the same kind of Polish flowers were awarded a cup.

HORTEX also exports other cut flowers, including chrysanthemums, roses of various colours and shapes, freesia, etc. Potted plants are exported too: Nephrolepis, Kroton, Difenbahia.

Please find on the next page a report from one of the horticultural plants in Warsaw

follow fashion changes in almost every field. And fashion for flowers changes too. There had been a time for roses, next for carnations. And, of late, Warsaw people are in love with gerberae the finest of which are bred at Mysiadło: those cultivated there are big, and they come in a great variety of beautiful pastel shades.

Observing the rule that the customer must have what he desires, all Warsaw flower shops try to secure deliveries from Mysiadło. Flower specialists know perfectly well that all flowers supplied by that producer are of top quality, being given the best of care there; and that they are always fresh. It is not far from Warsaw to Mysiadło — barely 15 km. and you can go on a city bus.

Rows of hothouses can be seen from far away. Green plants and colourful flowers outline behind the windows. The Mysiadło Gardening Station occupies an area of 76 hectares, and it is specialized in hothouse cultures; its hothouses now cover an area of 20.5 ha., but they will not stop at that: more big-sized hothouses are under construction alongside those in operation where both flowers and vegetables abound.

"Our cultivation space under glass will soon reach 33 hectares — said Director Stanisław Gladecki. — Our Station has been recognized as Poland's best state-run horticultural farm. In our competition with other

the Mysiadło State Horticultural Farms Gardening Station breeds under glass both vegetables and flowers. It is from there that come, among others, the excellent Polish "short" cucumbers of the Skierniewickie, Iwa, and Wilanowskie varieties; they are seedless, particularly tasty and, what is most important, they are genetically pest-proof. Vegetables unquestionably constitute a significant part in the Station's cultures; but it is first of all its flowers that are responsible for the charm of Mysiadło. Thanks to them it is always spring at Mysiadło: hothouse cultures are organized in a way to have flowers bloom all the year round. And gerberae come first.

"We cultivate a dozen-or-so varieties of flowers in our hothouses — said Engineer Anna Domaradzka, Chief Production Specialist. — But priority among them is given to gerberae and carnations which are in bloom here around the year. We have wonderful qualities of these flowers; we breed a hybrid gerbera of the Dutch Jongenellen variety, and the black-centre gerbera. As regards carnations, we have American varieties, such as: Flamingo, White Sim, and Scania."

It had been a real pleasure for me to examine the gerberae cultivated at Mysiadło: their flowers are large, the plants sound. The application of adequate cultivation methods makes the flowers plentiful. They are bewitchingly beautiful, their petals wide, their

It is always spring at Mysiadło



farms of the same speciality we reached the best production results and, at the same time our economic effects have been good. We now have various types of hothouses, from simple (which have been erected first) to most modern, Dutch type, with automatic aeration and sprinkling sys-

stem thick and strong. Their principal charm is the variety of colours, from delicate pastel shades up to a very deep dark red. They look impressive in the hothouse. Carnations are carefully cultivated, too. They have big flowers and very long stems, as required. They come in several colours:



Mysiadło hothouses breed also seasonal flowers. Plentiful from January until May are onion flowers: the sweet-smelling hyacinths, narcissuses, and tulips. Attractive for their beauty and fragrance are the delicate freesias, coming in a variety of colours. Another kind of the seasonal flowers are anemones, apparently inconspicuous, but actually extremely decorative.

Autumn at Mysiadło is full of spring charm. There are again plenty of the sweet-smelling freesias in the hothouses.

There is, moreover, a profusion of big chrysanthemums, with different shapes of flowers and a great variety of colours: from very pale, through all shades of yellow and gold, up to delicate bronze. Good chrysanthemum qualities are bred at Mysiadło, such as Bronze, Bornholm, Jacob Layn, Long Island Beauty. They go on blooming until December, when tulips take their place.

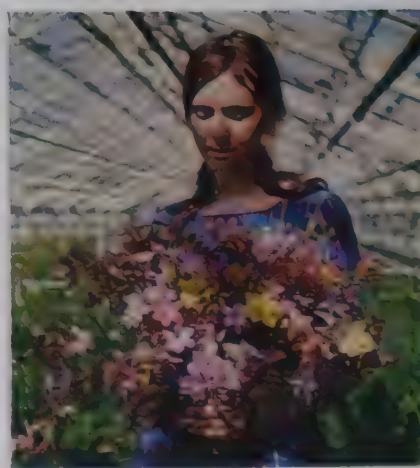
"We expand flower cultivation year by year — said Eng. Domaradzka. — In 1973 we sold 1,300,000 cut-flowers, against already two millions in 1974. Considering the enlargement of our hothouses, we anticipate further increase of flower cultivation; this will, of course, be followed by greater sales".

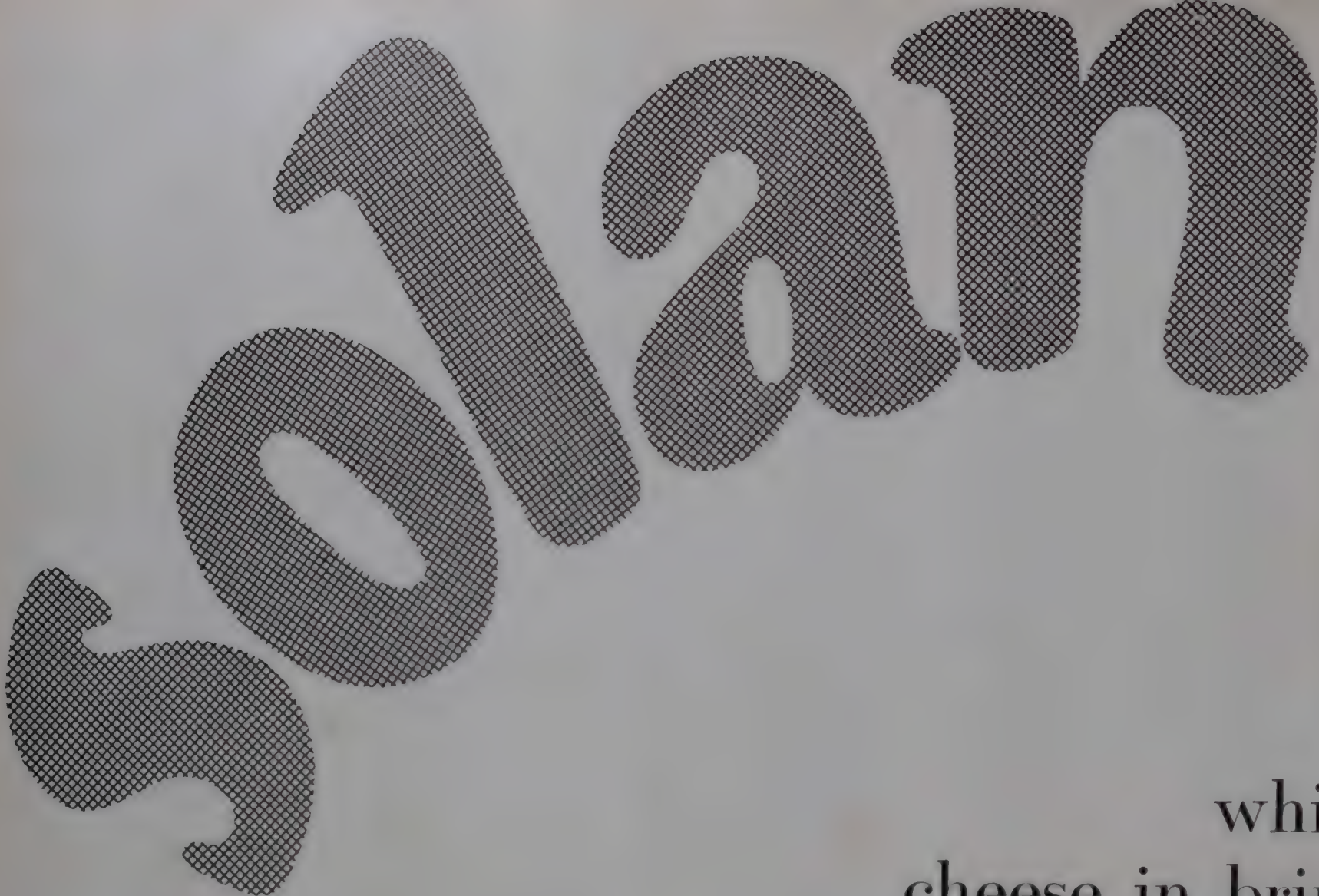
And what are the plans for the near future?

"Since we specialize in gerberae — Eng. Domaradzka went on — we plan to increase the space of its cultivation. In this connection we anticipate to produce one million gerberae in 1975. We will also step up production of carnations and onion flowers. As regards new flower varieties, we intend to start production of roses, orchids, and also of the colourful Anturium".

These are ambitious plans, to be sure. And the flowers are beautiful. The only thing we can do is to wish a plentiful crop!

J. Domańska





white cheese in brine

Due to a high protein and fat content this cheese is extremely nutritive. In view of its higher salt content it is recommended to hot and dry countries. It is made of cow's milk.

The milk for SOLAN cheese is first pasteurized and standardized, then set with rennet, and the following are added:

calcium chloride, potassium salt, table salt, starter pure cultures and, in the summer season, the Hansen's "Blego" decolourizer.

Some other useful information on SOLAN Cheese:

- ◆ it comes in the form of cubes, $11 \times 11 \times 8$ cm., of about 1 kg. each, not less than 16 kg. of cheese per tin;
- ◆ it has no eyes, or just a few of them as a result of fermentation;
- ◆ its structure and composition are slightly hard, its body is elastic and slightly hard; smooth and glossy at section;
- ◆ its colour is uniform — white;
- ◆ it has the aroma and flavour specific of cheeses ripening in a salty whey brine: salty, slightly acidulous;
- ◆ fat content in dry substance amounts to a minimum of 48%, with about 52% of water and about 5% of salt.

SOLAN Cheese comes in metal sheet tins lacquered inside, paraffin-oil-coated on the outside, packed two to a wooden crate.

Specially selected raw materials, modern technologies, specialization in production — account for the top-grade product with flavour and physicochemical properties never varying.

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in the line, including coffee, tea,
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oil seeds and grain, both in
Poland and abroad.



Examination and chemical analyses are performed
in POLCARGO's own laboratories
with up-to-date equipment
by highly qualified
and specialized personnel
with long years of experience.
All these operations are carried out
in accordance with the Polish standards
or the rules contained in the typical
London, Antwerp German-Dutch, Italian,
Paris and Danish standard contracts.
POLCARGO is renowned for its impartiality
— and remarkable professional knowledge
of its inspectors.

Coffee, Tea and Cocoa Beans

Superintendence of coffee, tea
and cocoa beans carried out
by POLCARGO covers:

- classification of quality —
(organoleptic assessment),
- sampling for quality assessment,
testing for arbitration purposes,
- ascertainment of quantity (checkweighing,
taring, tallying),
- checking of packing and supervision
of stowage.

All these proceedings take place
in strict accordance with the rules of international
associations

such as: The New York
Coffee and Sugar Exchange,
Coffee Trade Federation — London,
Cocoa Association — London
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POLCARGO has its own laboratory,
with up-to-date equipment
for analysis of coffee.

Its personnel consists of highly
qualified specialists with training obtained
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including I.B.C. Brazil as well as
on coffee plantations.
POLCARGO specialists carry out full laboratory
and organoleptic testing of the commodity
as well as assess "cup quality".

Oil Seeds

POLCARGO inspectors carry out superintendence
of oil seeds such as: rapeseed,
hemp, soya, sesame, groundnuts,
palm kernels etc. covering:

- quality examination
(visual and ascertainment
of free acid contents).
- checkweighing and ascertainment of quality,
- sampling for quality assessment
and arbitration purposes,
- inspection of cleanliness of ship's holds
or other means of transport,
- supervision of transshipment and stowage.

Grain

POLCARGO inspectors effect superintendence
of all grain both within export and import as well as
passing through in transit.

This embraces:

- quality assessment (impurities, moisture content,
hectolitre weight, uniformity of grain,
gluten content, glassiness, colour, odour as well as
infestation by parasites).
- checkweighing and quality ascertainment,
- sampling,
- inspection of cleanliness of vessels' holds
and other means of transport,
- supervision of transshipment and stowage.



polcargo



Some information
cultivated



on Polish
mushrooms

A rapid growth of cultivated mushroom (*Agaricus campestris*) production in Poland over the last four years is to be noted. Considering that this production in 1970 was around 2 thousand tons, the production in 1974 reached more than 6 thousand tons.

Several years ago cultivated mushroom production developed chiefly in the region of Warsaw, Katowice, Poznań and Łódź. Cultivation in other regions was small. At present not only the vicinity of larger cities constitutes centres of cultivated mushroom production.

The bispore cultivated mushroom "*Agaricus Bisporus*" is the type produced in Poland. The tasteful qualities of Polish cultivated mushrooms are universally known, since they depend to a great extent upon the bedding used for production. In Poland this bedding consists in the first place of horse manure. There are more than 2 million horses in Poland, fed with cereals which are neither sprayed with chemicals nor contain any chemical additives.

Exports of cultivated mushrooms are increasing with the growth of production. The first tons of cultivated mushrooms were exported by the foreign trade enterprises HORTEX in 1960. During the following years exports systematically increased, and in 1971 exports rose to 670 tons, in 1972 to 925 tons, and in 1973 to 1310 tons. The main types of cultivated mushrooms of grade extra and

with cut stalks. Their colour is to be white or cream. Cultivated mushrooms are free of organic and mineral dirt, free of traces of chemical spraying substances, free of excessive surface moisture, healthy, free of disease spottings. Characteristic for fresh mushrooms, free of foreign taste and odour, consistent firm. Polish cultivated mushrooms have closed heads, 2.5 to 5 cm in diameter. Picking of cultivated mushrooms, as also sorting, is carried out by hand. They are picked once or twice daily and cleaned by hand by means of brushes. Cultivated mushrooms are packed in baskets of 1 or 2 kilograms, or in 1/4 kg, as also in polyethylene bags of 1/2 and 1/4 kg.

The sole exporter of Polish cultivated mushrooms is the foreign trade enterprise HORTEX. The export product is prepared by the Horticultural Co-operative of the Union of the Horticultural Co-operatives.

West Berlin, Austria, Sweden, Czechoslovakia and the German Democratic Republic are the main importers of Polish cultivated mushrooms. HORTEX supplies this product also to other markets. Transportation means of suitably equipped trucks and railroad wagons. Polish cultivated mushrooms maintain their freshness and nice appearance over a period of several days and do not require transportation by air. On request of customers, HORTEX transports cultivated mushrooms by air.

Polish specialists abroad

Polish experts in various specialities are employed on almost all continents, in more than 40 countries. This is the reason why they are increasingly often mentioned in conversations and referred to in respective publications. Please find below a necessarily concise information on their work and achievements over the past few years. Polish specialists are highly valued for their initiative, professional qualifications, and assiduity. Thus, for example, Dr. Bogdan Szczygieł, a radiologist working in the Republic of Niger was awarded the Order of Niger for his achievements and dedicated work on behalf of that country.

Another form of acknowledgement for the work of a Pole is the awarding of a high decoration by the king of Morocco. POLSERVICE, the institution acting as the intermediary in employing Polish specialists abroad has a document, made out in Rabat, reading: "I, Hasan Ben Mahomed Ben Josef I Ben Hassan, King of Morocco hereby award the Quissem Allaouite Officer Cross to Dr. Czesław Górniiewicz, veterinary surgeon in Ksar Es Bouk Province, for his outstanding achievements in his work for my country. I desire on this occasion to extend to you my congratulations and best wishes for further success and achievements in your professional work".

Polish specialists receive numerous letters of thanks and words of praise for the high quality of work performed. The number of Polish specialists working abroad is increasing year by year. Many of them are specialists in agri-

working with success in Algeria, Iran, Iraq, Libya, Nigeria. They had numerous achievements in Morocco, Ghana, Zair and Zambia. By the work of her specialists and by transmitting their experience, Poland is extending actual assistance to the developing countries. In Iraq, a group of Polish experts is supervising irrigation projects in the region of Ishagi and Ammarah.

Polish specialists are consultants in the Iraqi Ministry of Irrigation on problems connected with the planning of irrigation works.

Nigeria also employs several specialists in agriculture. Mr. Tadeusz Szczesny, Doctor of Veterinary Medicine, has been working for two years now in the locality of Kano, State of Kano, at the Ministry of Agriculture and Natural Resources. Local authorities in the north-western State of Sokoto are employing several specialists in irrigation, mechanization of agriculture and veterinary medicine.

A number of Polish experts are working in various specialized fields and at various positions in Morocco. Most of them have been engaged by the Moroccan Ministry of Agriculture where they perform various responsible functions. One of them, Mr Stefan Ronikier-Dolański, agricultural engineer, is a government consultant on animal breeding. He is an agricultural engineer, and has been working in the above-mentioned capacity for a number of years (1964—1969), achieving excellent results in his work due to which the Government of Morocco has once again requested

Polish experts have considerable achievements in improving breeds of Moroccan sheep. The knowledge and work of Poles helped in sugar beet production. Mr. Jerzy Kaczanowski, agricultural engineer, is supervising sugar beet production in the region of Sidi Slimane, where the Poles constructed somewhat later a sugar factory, and also in the region of El-Jadida where he adapted this crop to Mediterranean conditions. He gave priority in his work to seeds of Polish varieties which gave excellent results under the local conditions.

The authorities of the El-Jadida Centre sent a letter of acknowledgment of the Moroccan Ministry of Agriculture, in which the exceptionally good of results achieved in sugar beet production in Morocco, and the high professional qualifications of Mr. Kaczanowski, agricultural engineer, were underlined.

Polish specialists are also working in Casablanca. Dr. Zdzisław Pankiewicz, is responsible there for meat quality control, and quality control of animal products. Mr. Józef Kochański, veterinarian from the Serum and Vaccine Production Establishment, Warsaw, author of modern bacteriological technology, has been put in charge of organizing research and production of vaccines in the newly opened Biological Institute in Rabat.

Not long ago POLSERVICE sent the first orchardry expert to Meknes. He has a Master of Science degree in Agrotechnology, of the Orchardry Institute in Skierniewice, and is a former student and co-worker of, Prof. Pieniążek, the world famed Polish scientist

Continued

The good and effective work of Polish specialists, advantageous for the countries employing them, has made the name of Polish experts known throughout the world.

Apart from the words of acknowledgement, the POLSERVICE enterprise, Warsaw, receives increasingly more requests for experts from many countries.

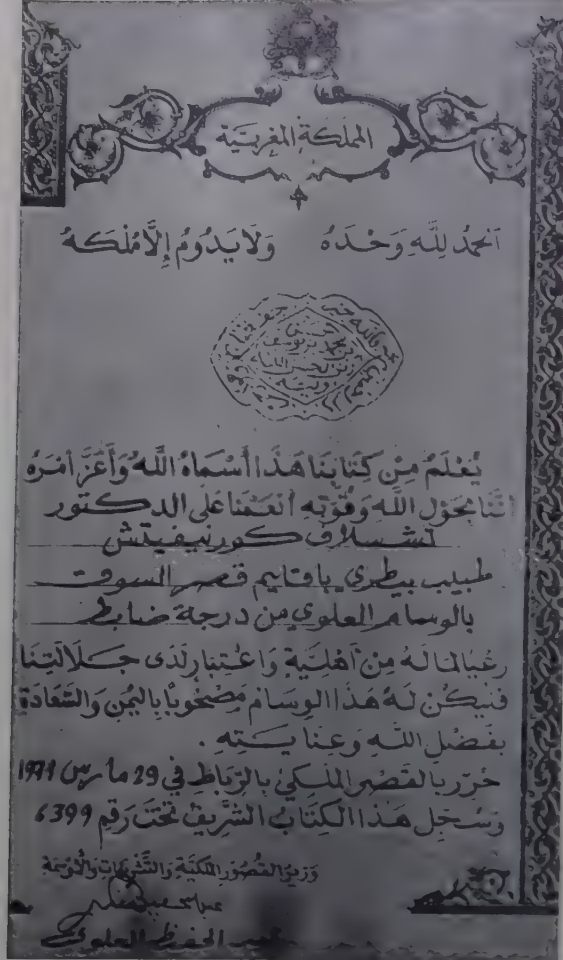
The Ministry of Higher Learning and Education in Iraq submitted in 1973 a request for several hundred Polish lecturers for Iraqi universities, some 30% of whom have to be specialists on agriculture. The State Organization of Soils and Land Reclamation, likewise in Iraq, has submitted a request for experienced specialists in various branches of agriculture: forestry, breeding, mechanization, and specialists on soil science and fertilization.

For some years past POLSERVICE has

been acting successfully as the intermediary in the employment of Polish experts abroad. Top-class candidates are selected, with many years practice, distinguished by their initiative and organizational capabilities and scientists-lecturers known for their numerous scientific publications and lecturing skills.

Apart from their professional work Polish experts have also other achievements. They frequently write diaries, memoirs, professional articles, collect items of folklore or conduct studies on local regional traditions and customs. They thus help to popularize knowledge on the people and their customs in various countries throughout the world.

J. Domański



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Protein from seas and oceans

Sound international cooperation

Fisheries considerably developed throughout the world over the past few years; in the case of socialist countries, Poland among them, the rapidity of development of deep-sea fisheries was higher than the average annual increase in the catch elsewhere in the world.

Considering potential resources of the seas and oceans, world catch of fish has not yet reached a proportional share in food economy. It can be anticipated therefore that, in the coming years, we will witness further rapid increase in world catches, especially in the still inadequately utilized fishing grounds, or in those not exploited at all; and also in catches of new fish kinds. This will be followed by intensified international cooperation in a more rational utilization of the seas and oceans in the years to come. It is a generally known fact that rapid growth of the population, and its increasing needs, combined with the relatively slow development of food production, will present a more and more difficult problem calling for solution in the world of today. Shortage of foodstuffs, especially those of animal origin, is an acknowledged fact in many parts of the world, involving vast areas. This situation considered, the problem of utilization of the still available proteins to be found in fish and in other animals living in inland waters, in seas and oceans, will be ever so essential.

To realize the significance of these resources, the following example will suffice: in the early sixties, of the overall quantity of about 25 million tons of animal protein produced annually in the world, as much as 88% were derived from ground production, and only 12% (namely 3 million tons) were supplied by fisheries.

On the other hand, it is obvious that live resources of the seas and oceans are not unlimited; that is why their exploitation under the old conventional doctrine of freedom of the seas is now highly controversial. Preservation of the biological balance can, therefore, be ensured only by a reasonable management of both animal and plant life, and by close international cooperation.

Modern fisheries

Poland has very well organized and developed modern deep-sea fisheries, covering both exploitation of fishing grounds, and processing of the catch. Polish experience together with that gained elsewhere in the world, is utilized in both these fields. The development of fish management in Poland up to now has, however, aimed principally at satisfying the home demand. This is why its share in international cooperation has been rather modest so far, although Polish fish economy and fish industry have reached the standard of the countries leading in this field, or even surpassed it.

The expansion of Polish fisheries which reach ever more distant ocean fishing grounds, was the result of changes in this country's deep-sea fishing fleet in which the former traditional small steam-powered trawlers have been replaced by several types of big modern modern fishing boats, mother ships, and fish processing vessels.

The development of fish processing has been very rapid in Poland over the years 1960—1971; responsible for this was both the turning over for operation of new factories, and the expansion and modernization of the existing. The essential factor accounting for the increase in production was the turning over for exploitation of industrial fishing boats which supplied increasing quantities of frozen fish, fish fillets, fish meal and oils. The demand abroad for fish products enabled development of their exports, especially of frozen fish fillets and salted fish. The principal buyer thereof was the United States.

Exports "from the shipside" expanded. This was connected with the fact that Polish fishing and processing fleets fished in the North-Western Atlantic grounds. In view of concern for profitability, these ships delivered frozen fish in blocks and frozen fillets in ports of the United States several times in one sailing. The excellent quality of the product was up to that market's requirements.

Exported to countries in Western Europe were: smoked fish, and salted fish. All these products enjoy a good name with buyers thanks to their high quality and excellent flavour a result of skilful application of modern processing technologies.

Foreign trade

Polish foreign trade in fish and fish products developed rapidly over the 1960—1971 decade. The business figure (exports from and imports to Poland) reached in 1971 — 174 million exchange zlotys (1\$ USA — 3 exchange zlotys).

Within those years Poland imported fish meal — a major component. The role of this product in Polish foreign trade had, however, been insignificant, as its value in overall trade amounted to about 0.3—0.6%. Slightly higher in that trade was the share of consumer fish products, accounting for 1.4—3.1% of the overall business value.

The suppliers of these commodities to Poland were: Soviet Union, Iceland, Denmark, Norway, and the German Democratic Republic.

Polish exports rose more rapidly. In the overall

in 26.6% to 35.8% of the overall trade value.

Exports of Polish consumer fish products in 1971 reached 708% of the volume, and 442% of the value of 1960 exports. The average annual increase in Polish exports amounted within that period of time to about 10.0% of the value. Late in 1971 the value of exports reached the sum of 62 million exchange zlotys; the estimated 1974 value is 110.0 million exchange zlotys. Responsible for the significant increase in exports over the past few years have been the fundamental structural changes in these exports.

The share of sea fishes and their products rose in Polish exports, at a simultaneous drop in exports of fresh water and salmon type fishes. Restriction of exports to a few groups of products only allowed specialization and perfect mastery of production technology; these groups were those in greatest demand abroad. Poland found buyers for its fish products in 30 countries, the Federal Republic of Germany, Belgium, the United States, and Sweden among them.

Business forecasts and planning

Polish fish management will receive in 1974 new production and services capacities concentrated principally on expanding the fleet and on its rational operation.

The bulk of ship purchases will consist of the following vessels: 3 modern wide-range trawlers; one refrigerated transport ship for servicing fleets operating in distant fishing grounds; 14 fishing boats for Baltic fisheries (to complement the Baltic stock). Regardless of purchases, the flotilla now in operation will be steadily modernized.

Polish fishing boats began operation in 1973 in North Pacific fishing grounds; they expanded their work in the South-Eastern Atlantic area. Greater has also been of late Poland's interest in North Sea catches — the area intensively visited by Polish fishing boats at one time.

The Polish fishing fleet will continue to expand the range of its operation to areas not yet utilized, or utilized in an insufficient degree.

Further modernization and expansion of the Polish fishing fleet will be carried on over 1976—1980; employment

Protein from seas and oceans

will also increase, in spite of a certain reduction of crews aboard separate ships produced by mechanization of catch and fish processing aboard. The tonnage of the Polish fishing fleet will reach by 1980 about 600,000 Gross Register Tons.

It is anticipated that Polish fisheries will catch in 1980 about 800,000 tons of fish.

In view of the present needs of agriculture and breeding for fish products, it can be assumed that the 1980 catch will involve a bigger volume of fish for purposes other than consumer — up to 40% or more.

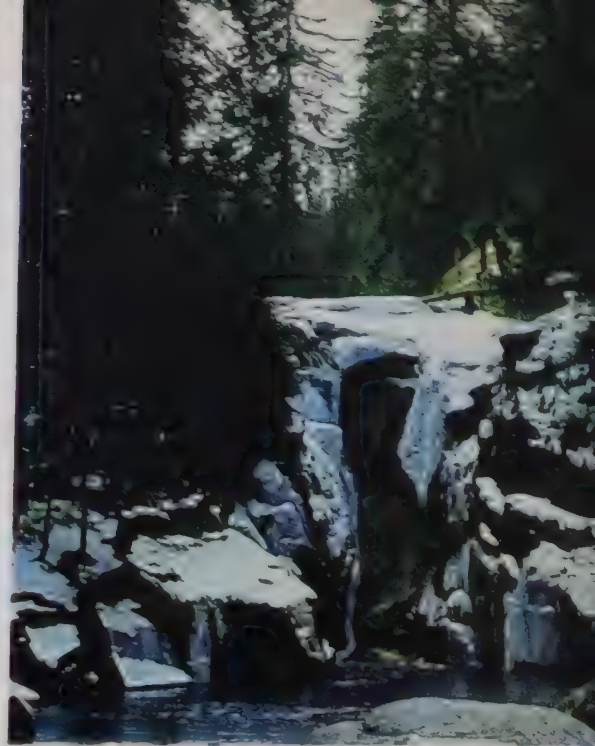
The anticipated Polish 1980 exports are to reach about 150,000 tons of consumer fish products, and imports — about 35,000 tons. The principal objective will be to have a more diversified choice of goods on the domestic market.

Zbigniew Skierkowski L.L.M.





1. General view



2. A stream



3. Szrenica shelter

5. The 13th century Wang Temple



4. CIEPLICE Hotel Café in Cieplice Śląskie

6. Bierutowice



POLAND INVITES YOU

Polish Sudety Mountains have many years now competed with Carpathian Mountains as a tourist region. And, as a matter of fact, they have succeeded successfully. They have a great many devotees among tourists and holidaymakers — fervent fans of rest in that area. This is why I suggest a visit to these enchanting mountains as the nearest opportunity. One of the opportunities are, for example, meetings at the annual horse auctions in Książ which ought to be combined with a visit to one of the studs of which there are several in Wrocław province. It is even not necessary to especially try hard to find an opportunity. The steadily expanding international trade contacts provide ever more occasions to our partners from abroad. But, reverting to the planned excursion: let's learn something more about the Sudety Mountains.

As you might remember, the Sudety are among the oldest mountains in Europe; and their scenery is really beautiful. Particularly fine is the Karkonosze Range. As regards plant life, this is the richest and most curious

in the Karkonosze Mountains, and to the neighbouring holiday and rest resorts and spas. This town was founded in 1111, on the site of a former stronghold; now a centre of tourism, it boasts many attractive architectural monuments, and is moreover an important rail and road traffic junction.

The locality of interest quite close to Jelenia Góra is the Cieplice Spa, a health resort whose hot springs (44°C) are recommended for rheumatic diseases and treatment of trauma sequels. The spa has a beautiful park, monuments of historical interest, and a natural history museum with Poland's largest collections of butterflies and birds' eggs; it is among the world's richest museums of this kind. Worth visiting is the near-by Sobeśzów, a rest resort amidst forest-covered hills. Ruins of the Chojnik Castle are located on the bank of a river flowing at the foot of these hills.

The biggest rest and touring centre in the Karkonosze Range is Szklarska Poręba. Situated in a vast valley among low hills across which a river

flows, in good weather visibility is within an 80 km. radius. Karpacz is attractive all the year round, with its many woods, beautiful tourist and ski trails.

The river Łomża forms the border between Karpacz and Bierutówice, located right in the mountains, on a slope commanding a vast view of the entire Karkonosze Range and also of the vast Jelenia Góra valley that can be seen from almost every place. The principal tourist attraction in Bierutówice is the 13th century Wang Temple, purchased in Norway in 1842 and set up here after partial reconstruction which restored the original aspect.

Prominent among the Karkonosze hills is the wood overgrown Grabowiec hill. A Baroque chapel was erected atop it, with a spring in front of its altar. An amusing superstition is connected with this spring: allegedly, if one walks around the chapel seven times and then takes a drink of the spring's "miraculous" water, one will be successful in love; that is why the spring has been called "love spring".

Perfect rest at the foothills Karkonosze Mountains

area of the Sudety. Rich, too, is animal and bird life. That is why a National Park has been established in the Karkonosze area, forming an interesting nature reserve.

The Karkonosze Mountains are attractive in all seasons. In winter time they are an actual skier's paradise, both for beginners and those skilled. In the spring, summer, and autumn they offer possibilities for many beautiful excursions.

The Karkonosze Range is the most popular touring region of the Sudety Mountains. Wandering is made easy by convenient, well marked trails, numerous lodges and shelters and chair lifts, and by good public transportation facilities connecting the various localities.

The town of Jelenia Góra is a handy

base for excursions into the mountains, with mountains screening it at all sides. Thanks to its situation and excellent climate conditions, Szklarska Poręba has become a big rest and winter sports centre.

The other big holiday resort in the area is Karpacz which is, moreover, one of Poland's first-ranking winter sports centres. Situated on the northern slopes of the Karkonosze Range, in the valley of the Łomnica river and of one of its confluent. Towering over the locality is the conical shape of Śnieżka Peak — the highest in both the Karkonosze and Sudety Mountains (1603 m.), and the most popular excursion goal from Karpacz. There is a 17th century chapel at its top, a meteorological observatory, and a tourist shelter. The view from that mountain is among the most beautiful in the Sudety

Mountains. According to most recent examinations, the spring water has a certain degree of radioactivity.

It is not far from Bierutówice to Polana — a ten-hectare meadow amidst the woods (at 1100 m.), with wonderful plant life in the spring and summer and, in winter, excellent skiing grounds. There is a fine, country style tourist lodge at Polana, named after Bronisław Czech, a famous Polish skier.

There are many more interesting sites and localities in the area worth visiting and admiring. Charming waterfalls, mineral springs with crystal-clear water with radon content; wide vistas on the mountain ranges. The Karkonosze Mountains will be a pleasant and unforgettable experience for you, and you will enjoy perfect rest at their foothills!



The 50

Horse Auction in Poland



Great excitement at Książ

No wonder — and what an event it was!

Attractive. Surprising.

You could examine and, of course, buy the fine horse. Every animal seemed more beautiful than the one admired before.

Polish sports horses were stunning with their excellent build and gracious movements. Tension grew with every presentation.

Bids were thrilling, decisive and rapid.

Well, Polish horses are



The 50th

Horse Auction in Poland

WITH ATTRACTIVE ACCOMPANYING EVENTS

The 50th horse auction was held in Poland from May 18 to 20, 1974, marking a jubilee of this event.

Buyers from around the world were invited to attend. Some arrived with families. They have all been given a cordial welcome by ANIMEX Foreign Trade Enterprise, the organizer of the auction.

It has been a very exclusive event. Only high-class purebred sports horses, carefully preselected, were presented, and prices were appropriately high. Several score horse auctions are held in Poland every year. Not all of them are, of course, of such a high standard; but the horses offered are often not less attractive.

Since the interest of foreign buyers in Polish horses is growing, the large-scale auction programme prepared by ANIMEX provides for even more auctions in the years to come. Let a few figures be an illustration of this trend:

Six auctions were organized in Polish studs in 1972; 14 — in 1973, and already 32 — in 1974.

Among the most interesting 1974 auctions (to be held also in the following years) were:

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| <p>"Wielkopolska" breed horses</p> <p>Arab horses</p> <p>Horses of various breeds</p> | <ul style="list-style-type: none"> • Koźle stud, (July 2); • State Stud (Stallions), Sieraków near Poznań (August 13); • Training Centre, Poznań—Wola, (August 14); • State Stud (Stallions), Kwidzyń near Gdańsk (September 6); • Ptaszkowo State Farm, Poznań Province (September 7). • Janów Podlaski Stud, an event organized specially for buyers from the United States, Canada, Great Britain, Sweden, and the Federal Republic of Germany (September 17—18) • State Stud (Stallions), Koźle (October 23); • Breed Livestock Centre, Lubiechów near Wałbrzych (October 24) |
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The last auctions of the 1974 season were the ones at Łobez (Szczecin Province) and Poznań Breed centres (November 14—16), where horses of various breeds were presented.

The following events will remain on the auction programme: Biały Bór Breed Centre (located in a scenic landscape in Western Pomerania); Poznań-Wola training centre; State Stud (Stallions), Łąck (near Płock); Arab Horse Stud, Janów Podlaski; State Stud (Stallions), Książ (Wrocław Province); Warsaw-Służewiec.

Also the auction at the Starogard Stud (near Gdańsk) will remain on the programme. It is specially popular with buyers from abroad because of the colourful accompanying event — the St. Hubertus Fox Hunt, ending with a savoury meal served in the woods at a bonfire.

The 50th jubilee sports horses auction at Książ had a particularly spectacular setting; and, moreover, buyers and visitors could take advantage of the comfortable accommodation at the SUDETY Hotel in the nearby town of Wałbrzych which provided coach transport to the stud and to all the occasionally organized events. At the parking lot at Książ (arranged on a vast meadow and tree-screened from sunshine) visitors changed to old-time carriages and drove to the Stud along a tree-planted avenue decorated with flags in their honour.

The principal event of the first day was the distribution of awards to the long-standing importers of Polish horses: diplomas and occasional medals were presented to Mr. Herman de Mol, Holland, and Mr. Eugen Schmidt, FRG, and to other persons.

8 to 10-year-old miners' sons.

The "conveyance to Stallion" opened the show: presentation to buyers of stallions and mares to be auctioned.

The night horse show, held in lamplight, and the parade of old-time carriages from Książ, Sieraków and Gniezno horse breeding centres, met with general applause.

Another item on the programme was the show of colour films on horses, shown at the tattersall.

The programme of the first auction day ended in a ball, with performance by the "Krakowiacy" regional amateur song and dance ensemble from the Boguszyce State Stud. This ensemble took part, in January 1974, together with a group of Polish horses and riders, in eleven events at the International Hall Competition in West Berlin; and, in July of the same year, in events organized at the cultural Exhibition at Turku (Finland), where an auction of horses previously purchased in Poland was held.

Over the next two days of the Książ auction the events were timed in a way so as not to interfere with the examination of horses. For a few hours every morning the paddock surrounded on four sides by stables changed into an artificial hippodrome — with its colourful fences, walls, and other obstacles.

CEPELIA and COOPEXIM stands, offering a variety of souvenirs and folk objects, were right beyond the paddock; also available were leather lines, such as huntsmen's bags and saddles.

The organizers of the event — the foreign trade enterprises ANIMEX and AGRAR and the Książ Stud Farm gave a lunch at which the excellent Polish vodka and beer were served.

The actual auction began on May 19, at 2 p.m. The high class of the presented horses showed in the commercial results: the number of horses sold, and the high prices they fetched. The organization of the event was perfect.

The total number of horses sold at Książ was 213, including 168 stallions (17 English purebreds, one Anglo-Norman, 7 of the "Wielkopolska" and 4 of the "Małopolska" breeds, 89 — Silesian breed, and 50 crossbreds (English purebred and "Szum" breed).

The buyers came from: FRG (81 horses), Italy (35), Switzerland (34), Sweden (16), Finland (14), Holland (13). The auction's most interesting and highest bid was on the second day, between Mr. Sven Janssen (Norway) and Mr. Ettore Simonazzi (Italy), who eventually bought the horse HENOL (Wielkopolska breed) for \$4,100.

The Książ event was highly assessed by visitors, who congratulated on it ANIMEX representatives, and Engineer Zbigniew Dąbrowski, Manager of Książ Stud, who was in charge of the organization.

IN SCENIC LANDSCAPE

In addition to breeding, its principal responsibility, the Książ Centre organizes sports events.

The location of the stud in the vicinity of Wałbrzych, a county seat, provides adequate accommodation and catering facilities; and well-kept roads encourage visits to the many neighbouring studs, and excursions.

Horses of various breeds can be purchased at the Koźle State Stud (Stallions) and at the Breed Livestock Centre at near-by Lubiechów; English purebreds — at the Żółkiewka-Strzegom Stud.

ORBIS Polish Travel Office offers a special form of vacation: "Vacation in a Saddle", at Książ. The scenery is really charming. Towering over the neighbourhood is the bulk of the castle — in times past the seat of the Świdnica Piast Princes, one of Europe's "Mountain Stronghold Wonders". The stables and the tattersall belonged at one time to the castle owners. A museum of old saddles, harnesses, and carriages is located in premises next to the tattersall. The castle — a huge structure with 415 rooms — is erected on steep rock slopes. Beyond the castle walls magnificent gardens are located on terraces at various levels, with 28 fountains and sculptures from the 17th and 19th centuries. A temple of Diana in the park connecting the castle with the stables now houses a planetarium.

The park avenues around the hippodrome are lined with very old trees. The entire park, called the "Książ Ravine", is a unique natural reserve. A hothouse, palm house, and a Japanese garden are located in nearby Lubiechów which at one time, was part of the princely estate.

Most illustrious princes, both from Poland and from other European countries and many foreign statesmen had been often entertained at the Castle. One of them was Winston Churchill (1906), whose stepfather was the brother of the castle owner, Princess Maria Teresa Pszczyńska (popular European socialite "Daisy of Pless").

Książ is a zero-class monument, with hardly any other like it in Europe. It is now being thoroughly renovated.

The most interesting part of the castle has been opened to visitors in 1974. A fine display of glass and china from Wałbrzych Glass Works was arranged on the garden terrace.

Part of the premises, allocated for hotel rooms and catering, will be opened to the public in 1975.

Results of research and studies of the Institute of Mechanization and Electrification of Agriculture (IMER) stations, when introduced into practice on farms, yield palpable advantages. These studies aim at higher mechanization of plant and animal production, and of transport; at stepping up land improvement and supplies of water to villages. These studies also promoted modern building methods compatible with the needs of farmers in various areas of this country. In 1974 IMER specialists carried on tests of 500 types of machines and equipment for agriculture, among them new types of grain combines, straw harvesters, machines for soil cultivation on sugar beet cultures. They also control cultivation and fertilization done by means of multi-purpose tools. At this moment the Institute works on the design of 2500 ton containers — for vegetables and potatoes. The mechanized technology of feed production at the young bulls breeding farm designed by IMER were tested in 1974.

IMER prepared, moreover, designs of standard, fully mechanized farm buildings for farms specializing in cattle, hog, sheep, and poultry breeding. Such buildings will be erected from cheap, easy to assemble prefabricated elements. Items: a house for 6000 pigs, and a calf stable with 250 stalls. Scientists of the Institute have also had great achievements in mechanization of land draining operations, laying of plastic water plumbing, maintenance of land improvement facilities, and building of country roads. For the purpose of reaching better breeding effects, IMER specialists developed various types of roof, wall, and ceiling ventilators permitting to have always the same temperature and air humidity in stables, pig houses, and storage premises. These ventilators will be mass-produced in Poland.

Brown coal for agricultural purposes

The Vegetable Institute's Fertilization Department, Skierniewice, has since 1967 done research on the utilization of brown coal and of brown coal ash (power plants waste) for agricultural purposes. The studies involved examination of the suitability of brown coal as substrate in hothouse plant breeding, or as organic fertilizer.

Also examined was appropriateness of brown coal ashes for soil deacidification, and for enriching it with a variety of nutritive ingredients. Studies are still in progress, but the results obtained so far are encouraging, and may have great economic significance.

Research demonstrated that action of brown coal on improving soil quality grows with the degree of granulation of the coal.

Compared with other organic fertilizers, brown coal has more qualities. It is a standard material, meaning that each batch from the same deposit has identical physical and chemical properties. This makes it easy to determine dosages and the extra mineral fertilization needed for improving soil quality. Moreover, coal is an aseptic material eliminating the risk of pathogenic or weed infestation of the soil.

When coal is used as fertilizer it is not necessary to apply manure. This is of particular importance considering livestock production without the use of bedding is expanding, and in effect manure availability will be getting inadequate. When improving soil quality by means of brown coal, it is possible to properly adjust regionalization of cultures to the geographical and economic criteria. For example: turn sandy suburbia soils into fertile garden soil; or reclaim barren soil.

Another advantage of the system is that it saves the use of fertilizers. When using brown coal you do not have to apply magnesium or microelements, and calcium, potassium, phosphorus, and nitrogen quantities can be reduced.

CAMPING Cheese

The Regional Dairy Cooperative at Lidzbark Warmiński developed, applying a new production technology, an excellent CAMPING cheese, keeping its freshness extremely, and thus it is the very thing for tourists.

62 tons of this cheese were supplied to the market in 1973, and as much as 116 tons in 1974. This cheese was shown at the Poznań Domestic Fair and awarded one of the three prizes in the — MERKURY-73 Competition. It was put on the export list in 1974.

Dried mushrooms

Mushrooms dried by the conventional method, namely in open air, are of poor quality: their colour changes, their flavour deteriorates.

A new mushroom drying method was applied in Poland recently: in a vacuum with microwave heating.

Such drying is 5 times shorter than the conventional method and it yields a top-grade product.

As soon as furnaces with full power regulation are applied, the drying will be ten times shorter.

Cooperation between research centres and state farms

Scientists from the Institute of Plant Breeding and Acclimatization, Gorzów, in cooperation with State Farms in Zielona Góra province, developed a new technology for cereal cultivation on silt soils. High-yield grass is used for in-breeding. The same Institute is now working on the development of a wheat-and-rye hybrid for the Zielona Góra area soils.

Specialists from the State Farms Voivodship Association, in cooperation with scientists of the Szczecin and Poznań Agricultural Academies, developed and turned over for production two special livestock feeds: a milk substitute for calves, and a feed for intensive fattening of young bulls; this will be an economy of proteins in the expensive grain form.

Polish — Egyptian cooperation production in cooperatives

The Chairman of the Central Board of the Polish Producers Cooperatives Association and the Secretary-General of the Egyptian and Pan-Arab Central Union of Agricultural Cooperatives have recently signed an agreement expanding cooperation of the Polish cooperative movement with the Central Union of Agricultural Cooperatives in Egypt.

It was decided that various forms of exchanging information on the rural cooperative movement would be developed.

Polish scholarships would be made available for Egyptian cooperative workers.

Polservice — the foreign trade enterprise, will intermediate in services of Polish cooperative in production and trading experts who may be requested to go to Egypt. It is also assumed that the two cooperative organizations will exchange various goods of their production.

UNDERGROUND FARMS

The architect Jerzy Łapański has elaborated an interesting design of a complex poultry farm situated underground.

Placing the farm under the soil secures constant physical conditions for the breeding of poultry, without applying complicated equipment, guarantees at the same time the isolation of the poultry for preventing bacterial risks.

Thus, the farm can be installed on a ten times smaller area than usually. An additional advantage is the reduced size and improved operation of the internal transportation system by means of mutually insulated sections with diverse functions (operating on two different levels).

The area in open air above the underground farm may be used for greenhouses.

Let us protect starlings

Studies conducted by Polish scientists revealed that, to feed their young, one family of starlings must supply every day to the nest about 1300 insects and grubs. This great voracity of starlings is extremely useful for gardeners, fruit growers, and for the plant protection service. Starlings efficaciously cut down proliferation of harmful insects; that is why they should be provided convenient nesting sites in pest-infested areas. In Poland starlings are an ally in the control of pine forest pests.

School of staffs for the Polish agriculture

The Wrocław Agricultural Academy organized new faculties, in order to meet the intensively growing demand of Polish farming for agricultural schools graduates. In addition to the existing faculties: of agriculture, veterinary medicine, zootechnics, and water engineering, the following departments have been established: mechanization of agriculture, food technology, agricultural construction, agricultural pedagogics. It is planned to create a faculty of horticulture and, moreover, to organize a stationary course on problems of culture; its graduates will take care of all cultural activities in the countryside. The present enrolment of the Wrocław Agricultural Academy is 4,750 students (3350 at stationary and 1400 at extramural courses). 175 persons attend post-graduate classes. The majority of this Academy's graduates seek employment in the countryside. Many technicians now employed in farming enrol in extramural courses of Poland's five Agricultural Academies. The extramural training of cadres for farming in Wrocław province is based on the Training Centre of the WYSOKA Regional Agricultural Experimental Department. As regards the neighbouring provinces (Opole and Zielona Góra), consultation stations of the Wrocław Agricultural Academy, located at Toporów and Łosiów, are responsible for the training of farming specialists.

New stringbean varieties

The Variety Assessment Experimental Station, Śrem-Wójtostwo, in Poznań province, bred over the past five years many fine stringbean varieties, at the testing stage. Observations carried on over the past 2 years indicate that most fertile are the ASTA, FANA, IMA, and SAGA varieties. They produce non-fibrous pods, suitable both for processing and for home use. Considering the great economic significance of these varieties — they have adequate nutritive, biological, and flavour properties — they have been entered into the original varieties record.

ALCOHOL FROM SUGAR BEET

Associate Professor Dr. Władysław Uch, from the Agricultural Industry Central Laboratory, Bydgoszcz, and his team, devised a new concept for alcohol distillation which may lead to the reconstruction of a distillery system. The basic raw material used in this new alcohol production technology is the sugar beet diffusion juice obtained in sugar production. This juice has a low content of pectine which is a compound easily generating methyl alcohol. Moreover, it can be fermented faster than the potato mash, the standard raw material used in alcohol distillation. The new production method requires special adaptation of distilleries. Test production of alcohol from sugar beet diffusion juices was taken up 3 years ago by the Lubień Kujawski distillery. The results were excellent. Advantages of the new technology were examined and analysed by scientific institutes and laboratories. Annual production will triple compared with the production of alcohol from potatoes. Input expenditures will be recovered within one year. Moreover, substitution of sugar beets to potatoes in the production of alcohol will reduce by about 50 per cent the acreage of land now necessary for cultivation of potatoes and barley — the standard distillery materials. Another big advantage will be the extra feed obtained: more than 300 000 q. of beet leaves.

information

MECHANIZATION AND AUTOMATION OF ANIMAL FEEDING "Artificial Wet Nurses"

Polish veterinary surgeon Jan Grudziecki patented an invention enabling "mass, individual animal breeding": it is an undulating feeding tube permitting individual feeding and watering in big breeding farms. Moreover, thanks to automation applied in the design, hygiene will be by far higher: elimination of danger of diseases caused by bacteria, in the environment; combination of feed with premixes, or addition of medicines; addition of orally administered vaccines or other prophylactic agents, microelements, etc. It will be no problem to design an "artificial sow" on the basis of this installation; and this will enable: a) to cut down the nursing period and, consequently, to cover the sow again earlier; b) save the piglets in case of their mother's loss of milk or death; c) carry on piglet feeding if the sow has not enough milk; d) extend the "nursing" period even up to 10 weeks or more, which will help to keep more of the litter alive during the critical period. Every breeder will realize what it will mean to him to have an "artificial nurse"; it will permit to mete out individual milk doses; keep up the sucking process; keep an appropriate temperature of mixes; eliminate contacts of the staff with the feeds; reduce labour, increase nursing frequency. Economic effects of this invention are outright enormous: use of feed doses adapted to every animal permits to cut down the feed cost by about 30 per cent by eliminating wastage and by better utilization of feed.

Automated pig houses

In the hog fattening farms at Ładna and Cichawa (Kraków province) opened in 1974, the 1400-hog house is serviced by one man. This has been enabled by work mechanization and automation: the feed is supplied by a pneumatic duct directly to the troughs. Moreover, all stations are mechanically cleaned. All these facilities permit to cut down the amount of labour that would be required at conventional breeding.

The Ursus tractor in Sweden and Yugoslavia

In 1974 AGROMET MOTOIMPORT, the Polish foreign trade enterprise, concluded a contract with Mats Hultgren AB, in Jönköping for supplies of URSUS tractors and agricultural implements to double 1973 quantities.

Polish agricultural implements and tractors enjoy an excellent reputation in Sweden, and so does the service which operates rapidly and effectively, a non-stop disposal of the customer. This is of no minor importance during the peak of field work. The principal service station is in Jönköping, on the banks of the charming Lake Vättern, and is equipped with modern servicing tools, spare parts and possesses a park of vehicles with radio-telephones.

AGROMET MOTOIMPORT signed another contract in 1974 — with POLJOOPSKRBA of Yugoslavia covering supplies of Ursus tractors. The first sale of Polish tractors to Yugoslavia was effected in 1969 and today Polish exports mainly comprise tractors 35 and 42 HP. The contract recently signed specifies that 4500 tractors will be delivered prior to Dec. 31, 1974. Negotiations for a further 2000 continue.

A network of URSUS service stations and spare

